Clinical Lectures
ON
VARICOSE VEINS OF THE LOWER EXTREMITIES.

Delivered at St. George's Hospital Medical School,

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LECTURE III.
THE RADICAL TREATMENT.

GENTLEMEN,—I propose to deal in my present lecture with the main points of interest, to some of which I have been unable to find any reference elsewhere, connected with the radical treatment of varicose veins by open operation, a method which is, I need hardly say, neither original nor in any way novel, seeing that it was practised many centuries ago, although it has received little encouragement from surgeons generally until the last few years, on account of the risks which were formerly inseparable from it. The apprehension universally felt on this account, even quite recently, is sufficiently attested by the fact that I was consulted only a few weeks since by a strong and healthy gentleman, upon whom I have since operated with the usual success, who was, as late as 1882, most strongly advised by two of the first opinions in London on no account to allow some varicose veins, from which he was suffering, to be excised, because the chance of "blood-poisoning" after the operation would be so great. Fortunately the recent advances in surgery, thanks to a better appreciation of the antiseptic system on the one hand, and improved methods of operating on the other, have so revolutionised practice that any surgeon possessed of ordinary dexterity is now in a position to advocate, in appropriate cases, this radical treatment, as being more certain and far-reaching in its results than any other method, whilst it presents at the same time, under ordinary circumstances, no appreciable risk beyond that which is connected with the administration of the necessary anæsthetic and the making of a clean-cut wound through the skin.

In varicosity of the lower limbs the treatment by operation must of necessity be applicable to a comparatively small number only of the cases of this affection which come under the care of the ordinary practitioner, since, as I have often pointed out, the varicose veins are, in the majority of instances, so easily managed, with or without the aid of some of the various appliances to which I have before now called your attention, that the radical method, although quite justifiable, is generally not desired by the patients. Nevertheless, there occurs both in hospital and private practice a fair number of cases in which so much benefit can be afforded by this radical treatment that the surgeon may with confidence recommend the operation, which, as I have already said, may, I fully believe, be practised without any risk worth serious mention if a due regard be paid to surgical cleanliness and some small technical details. Further, even if it be conceded for a moment that there is associated with the treatment some slight risk, the advantages gained in discreetly selected cases altogether outweigh any possible danger connected with the operation. As a general rule, the question of the radical treatment does not present itself in cases of varicosity limited to the leg, in consequence of the extreme ease with which the affected veins are managed when they do not extend above the knee; so that the symptoms which from time to time arise are not, if proper care be taken, of a sufficiently serious kind to lead a patient to submit to the discomfort of an operation. It is also necessary to bear in mind that *in the leg*, excepting in certain cases to be specified hereafter, the operation very rarely entirely removes the necessity for wearing some kind of support, although in many cases the use of appliances may be made more tolerable. In varix involving both the leg and thigh the matter is altogether different. As I have already shown, the wearing above the knee of an apparatus of almost any kind, if it be effectual, is in most instances so inconvenient and troublesome, that patients will not infrequently submit with alacrity to any treatment which offers a reasonable prospect of relief from the intolerable nuisance at times connected with the use of such appliances. It is satisfactory to know, therefore, that by a simple operation, practically devoid of danger in any healthy subject, it is easy to remove in many of these cases all necessity for wearing any apparatus above the knee—an inestimable boon, especially with those to whom expense is an object and time of importance. Apart, however, from the question of the relief from the necessity for the use of appliances in these cases, it is found, as a matter of experience, that many of the discomforts arising in varix of the leg are either entirely due to, or much increased by, the coexistence of varicose veins above the knee; and, further, that these discomforts are susceptible of great modification in many instances, and in a few can be completely removed, by the proper treatment of the affected veins of the thigh, especially when the disease involves more particularly the long saphena vein, or is associated with a circumscribed varix at the saphenous opening.

Operations applicable.—Setting aside the various subcutaneous methods, which I do not propose to consider, as they may now be said to have entirely given place to the open method in the hands of most surgeons, the operations for the radical treatment of varicose veins may be divided into three kinds: (1) Those which aim at mere obliteration of some of the affected veins at one or more points; (2) those which produce a more extensive alteration, in cases of general varix of the limb, by the removal of large portions of the dilated vessels; and (3) those which in cases of local varicosity effect a "cure" by the removal of the whole disease. Technically these operations, the first step in all of which is the formal exposure of the vein or veins by dissection, may be arranged in the four following classes.

A. The application, at one or more points, of a single ligature around a vein, thus obtaining as many centres of obliteration as may seem desirable in any given case, and so diverting to some extent the current of the circulation, producing at the same time an alteration in the incidence of pressure in different parts of the limb. This proceeding, which approaches the ordinary subcutaneous method more nearly than any other of the open operations, but is more certain in its result, is suitable in a large class of cases of extensive general varicosity associated with one or more of the following conditions: (1) Intolerance of the use of appliances; (2) distress from excessive distension of the dilated vessels; (3) threatened bursting of thinned veins from over-distension; and (4) the coexistence with the varicose condition of intractable ulcers, eczema, and the like.

B. The division of a vein or veins between two ligatures. This operation is applicable to the same class of cases as the foregoing, but is much superior to it, as not only is absolute certainty of obliteration ensured at the points of ligature, but, in consequence of the section of the veins, a certain amount of retraction of the divided vessels also occurs, a very important fact, since it gives entire relief to all pain and inconvenience which may be caused by the dragging, upon the parts above, of the heavy mass of full veins below. Hence the relief which follows this operation is certainly, as a rule, much greater than that obtained from the mere ligature of the vessels without division. This point, to which I can find no reference in the ordinary works on surgery, is particularly well seen in cases of circumscribed varix at the saphenous opening, in which, as I shall show later on, the affection often disappears after the division or removal of a portion of the long saphena vein in the thigh.

C. The formal removal by dissection of large portions of exaggerated varicosities in general varix. All the ends obtainable by the two previous operations are better and more completely effected by this proceeding, which is, of course, also especially adapted for the complete cure of local varix of any kind, single or multiple cysts, solid tumours the results of ancient thrombi, phleboliths, &c.

D. The ligature of veins around large areas of exaggerated varix in general cases, or in local varicosities, with a view to so interrupting the blood supply as to cause a shrinking of the varicose mass. I have ceased to practise this form of operation (1) on account of its uncertainty, and (2) because, while it is more uncertain, it is not less dangerous than the formal removal of the varix by dissection. The uncertainty depends upon the impossibility of making out which veins

are really connected with the varicose mass. Upon this subject I can speak with some feeling, as I lost the confidence of a most valuable patient by assuring him that I could cure a varix, of very moderate size, on the inner side of the knee by this operation; but, although I ligatured no less than five large veins, apparently leading to it, the varicosity itself was not affected in any way whatever. Again, I have mentioned a case, in my first lecture, in which a large varix lying directly upon the long saphena was in reality altogether independent of that vein, which would certainly have been ligatured by any surgeon practising this operation, entirely without any good effect. I have seen other cases of the same kind.

Details of the operations.—On this head it is not needful to say much. The strictest precautions as to surgical cleanliness must of course be observed in all cases, and on no account should the packing of the part in a wet carbolic dressing for at least four hours before the operation be omitted, the limb having been previously cleansed with ether and soap. In the mere application of a ligature, as in operation *A*, the vein is simply exposed through a small incision, and isolated by gently insinuating an aneurysm needle or eyed probe beneath it, by which a ligature is carried round the vessel. This ligature is ultimately tied tightly, and its ends of course cut short. In operation *B* the vein is exposed for an inch and a half, more or less, and two ligatures applied as before, with an interval of an inch or thereabouts between them. The intervening portion of the vessel is then divided with scalpel or scissors, care being taken that the vein is not caught up by forceps, a point which at first sight may appear trivial, but which is in reality of some consequence, since a bruise of the vein may result in extensive thrombus, a complication to be avoided, as it may prove serious, especially if by any chance the attempts to keep the wound aseptic should fail. No sutures are necessary in either of these operations, the careful application of the antiseptic dressing being all that is necessary. In the removal by dissection (operation *C*) of large areas of exaggerated varix in general cases, or isolated varicose masses, &c., a single or crucial incision is made over the mass; the cellular tissue having been laid open and the veins in some part exposed, the whole varix may be quickly laid bare by running a director over and around the dilated vessels; an occasional touch with the scalpel is necessary, but the use of the knife is best avoided as much as possible, as there is less danger of wounding any of the veins—a mishap which, although not in any way serious, gives rise to some bleeding and prolongs the operation. As many as possible of the veins running into the varix are now divided one by one between double ligatures; the mass is then drawn out and removed, after any radicles which may have escaped division in the earlier part of the operation have been ligatured and divided. The complete exposure of the varix, at the commencement of this proceeding, is much facilitated by throwing the veins into full relief by tying a band around the limb above sufficiently tightly to arrest the venous circulation to some extent. The margins of the wound, which are sometimes extremely thin, should be treated with as much delicacy as possible, being held, if necessary, by the fingers rather than forceps, to avoid bruising. The edges come together accurately, and are most conveniently sutured with chromic catgut, after all oozing from the surfaces has entirely ceased. The antiseptic dressing is finally applied, great care being taken to make equable and rather firm pressure, in order to secure early adhesion between the under surface of the skin flaps and the deeper parts—a point of much consequence, as the integrity of the skin flaps, when very thin, without doubt solely depends upon this early union between the parts mentioned. As a rule, the wound requires very little attention after the first dressing, which need not generally be changed for a week, by which time the healing will have probably been completed. I have seen in my cases neither fever, suppuration, nor untoward symptom. There is, however, one objection which a captious critic might make in connexion with this operation—viz., that the final healing of the wound is sometimes rather tardy. Personally, I attach but little importance to this objection, since, so far as I have seen, even in the slowest cases the parts are sufficiently sound at the end of ten days, or at the most a fortnight, to allow the patient to get about. One word as to the best kind of ligature is necessary. Chromic catgut is, on the whole, the most suitable material for all of these operations, excepting the first, in which, as it is important that the ligature should not dissolve too soon, tendon is probably better.

In order to properly estimate the value of the radical method of treating varicose veins, and to ascertain the class of case which is likely to derive the greatest benefit from one of the several operations mentioned, it is convenient to consider the treatment as (1) curative and (2) palliative.

I. *Curative.*—The cases in which a "cure" in the true sense of the word (i.e., entire obliteration or removal of the disease) can be effected must necessarily be somewhat limited in number, since they comprise the following conditions only: (α) Local and circumscribed varix, (β) single or multiple cystic dilatations, (γ) solid tumours the result of ancient thrombi, or (δ) ordinary phleboliths.

A good instance of the first of these conditions was seen in a patient of mine, a railway guard, who was in the Belgrave ward, and from whom I removed a large mass of varicose veins situated at the inner side of the knee; the whole varix was confined to a tributary of the long saphena, which was itself quite uninvolved. The cure was complete, and the man now, some months after the operation, follows his ordinary occupation, no sign of recurrence having shown itself. I have already referred to another case of the same kind in which I removed fifteen inches of varicose veins from the calf of a man who has just recently returned to show himself without a trace of varicosity seven months after the operation.

Of the second variety (cystic dilatation), I removed a good example from a girl who was in the Princess ward; the cyst was a complete dilatation of the saphena just above the knee. The vein was exposed above and below, ligatured, and the tumour dissected out; it was about the size of a cherry. A second smaller dilatation existed lower down in the vein, but it disappeared spontaneously after the removal of the one above. This kind of cyst is most frequent in connexion with the saphena vein, and is invariably developed near a valve. The pain to which these dilatations give rise when they become distended is sometimes very great; I have had to remove several in private practice for this reason. In our museum there are some excellent specimens, especially one which was removed by Mr. Pick; it is as large as a walnut.

Of the solid tumours resulting from thrombi in these cysts, I dissected out a beautiful example from the leg of a gentleman forty years of age; it was said to have appeared suddenly, had existed for two months, was very painful, and as large as a filbert. It proved to be a venous dilatation, full of hard organising clot, evidently the result of sudden coagulation at a former date.

II. *Palliative.*—Cases in which the radical treatment may be applied for palliative purposes are fairly numerous, and although in none of these can anything more than partial relief be, with absolute justice, claimed as the result of the method, because the actual disease is not entirely removed or completely obliterated, still the effect on the symptoms in many instances is so marked that, for all ordinary purposes, a cure may be said to be effected; indeed, the benefit derived by some patients is so great that it is difficult to persuade them that an actual cure, in the true sense, has not been produced. Amongst the conditions wherein the relief obtainable from operation may be safely anticipated to be sufficient to justify the recommendation of this treatment, is that of general varicosity associated with some local excess of varix, or with distinct cystic dilatations. In many cases of extensive varicosity the whole of the serious discomfort experienced depends upon one or both of these conditions, which may be either in themselves painful, or by their presence interfere with the proper management of the varicose limb. Again, in similar cases, cysts, by repeated distension, increase until they are not only painful, but become so thin that they are liable to burst, and may so give rise to serious bleeding. The removal of these local conditions, when practicable, either completely or in part, is clearly not only expedient, but in some instances really necessary. Even in cases of general varicosity, in which the disease appears to be uniformly distributed, when there is much pain, the relief obtained by the excision of portions of the affected veins in different parts of the limb is quite remarkable. I have myself seen an amount of relief which was almost incredible obtained by the removal of considerable lengths of diseased veins from each leg and thigh in a case of double general varix. As to the permanence of the relief in these palliated cases, it is difficult to give any very

positive opinion, on account of the impossibility, as a rule, especially in hospital practice, of keeping the patients sufficiently long under observation to form a thoroughly reliable judgment on this matter. That the relief, however, lasts for long periods is certain. I occasionally see, for example, patients upon whom I operated five years ago, in which the discomfort then relieved has shown no indication of recurrence. In the cases mentioned under the head of the "curative" treatment, I believe the cure to be quite permanent.

Amongst the cases in which the radical treatment can be with justice considered palliative only are two conditions, which are of sufficient interest to merit separate consideration. One of these is the *circumscribed varix at the saphenous opening* and the second is the "*creeping*" *thrombus* to which I alluded in a former lecture.

I. *Varix at the saphenous opening.*—The effect of complete division, or, better, the removal of a considerable portion, of the varicose saphena vein in cases of this kind is remarkable, inasmuch as the operation is followed in many cases by a shrivelling of the varix at the saphenous opening. This rather curious fact, to which I have seen no allusion elsewhere, is well illustrated in the following three cases.

1. In 1885 I removed from the thigh of a gentleman about three inches of the long saphena vein, with a view to relieving some symptoms connected with extensive varix of the right limb. The relief afforded was all that could be desired, and, in addition, a result for which I was not in the least prepared, a large varix at the saphenous opening almost entirely disappeared—a most gratifying occurrence, as that condition was associated with much inconvenience, which the use of a truss had not in any way modified. When the patient was seen not long since, the varix in question was hardly perceptible.

2. A man in the Belgrave ward, sixty-one years of age, whose case I have mentioned before for a different reason, had a large varicose mass above the knee, and a varix as large as a pigeon's egg at the saphenous opening, with slight varicosity only of the long saphena vein itself. I removed the varicose mass at the knee and divided the saphena. The varix at the saphenous opening rapidly diminished, and when the patient was last seen, four months after the operation, could hardly be distinguished.

3. A young woman from whom I removed a cystic dilatation from the trunk of the saphena had also a well-marked varix at the saphenous opening, which three months after my operation was only just perceptible. I have seen other cases.

At first sight these results seem very peculiar, but in reality they are simple enough, and are easily explained in the following way:—The existence of this varicose tumour at the saphenous opening depends, no doubt, originally upon dilatation of the proximal end of the saphena and adjacent part of the femoral veins, produced as I have described in my second lecture; subsequently, however, its size is much increased by the constant dragging upon the varix by the heavy weight of the distended varicose saphena and its tributaries in the limb below, so that the walls of the tumour at the saphenous opening are being continually drawn down, with the result that the small amount of contractility that they may possess is altogether overcome. The division, or, as is preferable, the removal of a portion, of the long saphena liberates its proximal end and relieves it from this continual downward traction, the effect being that the cystic varix above contracts and to a great extent disappears, especially if it receives for a short time after the operation gentle support from an accurately fitting but very weak truss.

II. *Creeping thrombus.*—This condition is not altogether common. I have already mentioned a typical example, in which a patient in the course of several years has developed, in consequence of successive blockings, a thrombus which extends from the ankle to the middle of the thigh, and which must, if more blocks form (as is almost certain), sooner or later extend into the femoral vein. Now it seems to me that, as the coagulation always takes place upon the proximal end of the creeping thrombus, the rational treatment here is to separate this clot from the proximal patent end of the vessel by dividing the saphena between two ligatures above the thrombus, and this I propose to do if the patient will consent. In cases in which the creeping thrombus is small, I feel sure that the proper treatment is, at a time when the whole thing is quiescent, to remove the thrombus, with the vessels of course containing it, and so do away with, as it were, the evil inclination to coagulation which is undoubtedly produced by the old clot, but which there is no real reason for supposing would necessarily occur in connexion with the small new thrombus which may form as the result of the operation.

CASE OF

ANEURYSM OF THE ARCH, PERFORATING INTO THE VENA CAVA SUPERIOR.

BY W. T. GAIRDNER, M.D., LL.D. GLASGOW.

IN the beginning of the year 1888 I had a case so closely resembling the one recorded in THE LANCET of June 15th, 1889, that a brief statement of the main facts of the case will no doubt be acceptable, although I have no time at present to discuss the subject at length or to enter on consideration of the literature of similar cases. The aneurysm, as appears from the report by Dr. Joseph Coats in the Pathological Reports (No. 1816), occupied chiefly the transverse portion of the arch, which was generally dilated, but with two more localised dilatations, one extending to the right, the other to the left. The first of these compressed the vena cava superior, and was adherent to it, forming a round bulging into the interior of the vein, corresponding with the middle and upper third of this vessel. On the summit of the bulging there was a rounded aperture of communication, a quarter of an inch in diameter, and an inch and three-quarters beneath the origin of the innominate vein. The abdominal appearances were of no importance, and the parts, being removed *en bloc* to be placed in the museum of the Western Infirmary, can be examined in detail by any curious inquirer. The leading clinical facts of the case were as follows.

D. W——, a labourer, aged forty-four, was admitted to Ward 6 of the Western Infirmary, Glasgow, on Jan. 13th, 1888. He died on Jan. 21st, and the treatment, consisting of absolute rest in bed (as nearly as possible), with repeated doses of tincture of veratrum viride, did not seem to make any appreciable change in his condition or in the rate of the heart's action, which was unduly rapid throughout. The symptoms were very marked cyanosis, with general anasarcous swelling of the upper part of the body, extending secondarily down the back as far as the sacrum, but not at any time affecting the lower extremities. These symptoms were attributed to a common cold caught a week before admission; but on close questioning he admitted having been conscious for two years of a slight degree of pulsation referred to the right sterno-clavicular region and its neighbourhood, which did not, however, give him any concern. The first occurrence of swelling was accompanied by a feeling as if "something had given way" in the left side, this sensation being referred to a point rather to the left of the cardiac apex. He had no feeling of pain at this time, but of something like faintness and of a cold sweat. This continued for about ten minutes, and never recurred. Swelling of the face and right arm followed, but had considerably diminished in degree before admission. There was somewhat development of the small superficial veins all over the front, especially in the lower sternal region, extending from this to the præcordial, right hypochondriac, and right manubrial regions. The veins of the hand were somewhat distended, more so on the left than on the right side. Associated with these symptoms and physical signs was a very loud and characteristic murmur heard all over the front of the chest, but having mainly the distribution of the aortic double murmur, of which the ventricular systolic element (first sound) was loudest at the base, and the ventricular diastolic element at least relatively louder towards the lower sternum. The pulse was very decidedly stronger in the right wrist than in the left, but in the latter it could not be pronounced definitely abnormal; while in the former the usual characters of the pulse of unfilled arteries were quite apparent. There was no marked twisting of the radials, and some irregularity of rhythm occasionally, approaching to intermission. Rate of pulse 108–110, both before and after the administration of veratrum viride. The pupils were rather large, mobile, and equal on the two sides. There was some displacement of the præcordial dulness downwards and to the left. Another and distinctly abnormal dulness on percussion, easily demarcated from the præcordial, occupied the entire manubrium sterni, and extended both to right and left, but its

limits in the former direction were difficult to state, owing to the prevailing anasarca and impaction of the soft tissues. There was an appreciable but not very definite pulsation in the jugular fossa. Before death it had been surmised that some slight displacement of the trachea had occurred towards the left; but there were never any distinct signs of laryngeal implication. Notwithstanding the cyanosis, there was but little cough, and he altogether repudiated (on admission) the idea of any very difficult breathing or orthopnœa. There was, however, a faint tracheal quality in the respiratory murmur as heard at the upper sternum, and the respiration became decidedly noisy before death, without, however, any sense of paroxysmal or other dyspnœa. The stertor, in fact, was probably quite as much cerebral as arising from pressure on the air-passages. The death, in fact, seems to have been greatly due to failure of the respiratory reflexes, and not to any sudden change in the condition of parts in the thorax.

In remarking upon this case four days after admission (Jan. 17th, 1888), I find, from notes taken at the time by Dr. Oswald, that I characterised the case as one of thoracic tumour in the upper part of the mediastinum, and indicated that, but for the murmurs observed, the diagnosis might have inclined in the direction of a sarcomatous tumour of the glands. Such tumours often give rise to pressure on the great veins; while aneurysms do so much less commonly. But the facts in this instance led directly up to some kind of interference of the tumour with the venous return through the superior vena cava; while the other facts of the physical diagnosis implied a strong presumption in favour of the tumour being aneurysmal. I noted that the feeling of giving way in the left side pointed to some sudden physical change, which at that time I was inclined to suppose might have been a partial rupture or diffusion of the aneurysm somewhere into the cellular tissue, giving rise, perhaps, to secondary venous obstruction from thrombus or otherwise. It was probable, however, that the aneurysm had existed long before, and apparently with few symptoms of any such severity as to attract notice. Under this view of the case, I added, we must consider the man's state as one of instant and extreme danger, and the only thing that we can do is to try, if possible, to diminish the rate and impulse of the heart so as to avert a further calamity. For this reason, though not partial, as a rule, to the employment of veratrum viride, I gave it in this case in as full doses as we considered safe. After the post-mortem examination, I stated that the case was unexampled in my experience, though I had treated aneurysms opening into the auricles, pulmonary artery, &c. It was probable that the rupture took place at the time the patient indicated from his sensations of "something giving way," faintness, &c.; but it was noteworthy that the *locality* of the rupture as so indicated was deceptive. What he really felt locally was not the rupture, but the deranged cardiac action which accompanied and followed it. The absence of severe dyspnœa and orthopnœa, also of cough, up to a late period, was also very remarkable.

Glasgow.

THE DIAGNOSTIC VALUE OF REFLEXES.[1]

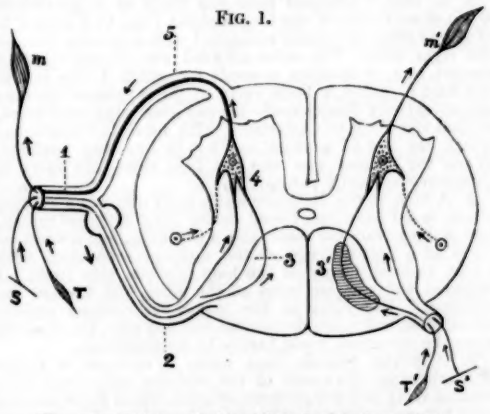
BY SEYMOUR J. SHARKEY, M.D., F.R.C.P.

IN the present paper there will be found nothing which can claim the smallest originality. It consists merely of an attempt to explain the manner in which certain phenomena may be utilised at the bedside for the purposes of diagnosis. Many medical men, and especially those who were educated before attention was called to the clinical value of the reflexes, do not seem to appreciate what a real aid they are in the investigation of disease; and it appeared to me, therefore, that an attempt to put the matter in an intelligible form might be acceptable.

The superficial and deep reflexes are comparatively recent additions to our means of diagnosis in diseases of the nervous system. Like many other new "physical signs," they are liable to be misunderstood and to have undue importance attached to them. One of the greatest difficulties in the practice of medicine is the variability of the normal. In the case of the heart, for instance, who can define the normal first sound? It varies not only in different healthy individuals, but even in the same person under different circumstances. The same may be said of the pulmonary sounds, and of most of those phenomena which we learn to trust in our attempts to diagnose disease. It is only after considerable experience that we learn to estimate correctly the value of physical signs. The superficial and deep reflexes form no exception to this rule; they vary very greatly, even in the absence of nerve affections, and before entering upon the question of their significance in disease it is necessary to consider how far they are variable in health. (Fig. 1.)

A reflex is a muscular movement produced by a nerve centre through an efferent nerve, in response to a stimulus applied to an afferent nerve; and a superficial reflex is a movement resulting from the stimulation of a superficial afferent nerve. There are, then, three anatomical factors in a reflex—viz., an afferent nerve, an efferent nerve, and a nerve cell. The external surface of the body covers a large area, and there must clearly be a great number of reflexes which may take place in connexion with it. But they are very inconstant in different individuals. A certain number have been selected as more constant than others, but even

FIG. 1.



Diagrammatic representation of the reflex functions of the spinal segment (after Byrom Bramwell). The left half segment is normal; the right half represents the early stage of locomotor ataxia, the position of the lesion being shaded dark. *s*, Skin from which sensory fibres pass through the common sensory motor nerve trunk, posterior root, and posterior horn of grey matter to the reflex centre (4). T, Tendon, muscle, and fascia, from which the sensory fibres pass which conduct the deep reflex movements. These fibres traverse the postero-external column. *m*, Muscle supplied by the anterior root of the left half segment. The dotted line passing from the crossed pyramidal tract in the lateral column represents the inhibitory fibre. The arrows show the course of the reflex impulse. On the right side the deep reflex movements are seen to be arrested by a lesion in the postero-external column.

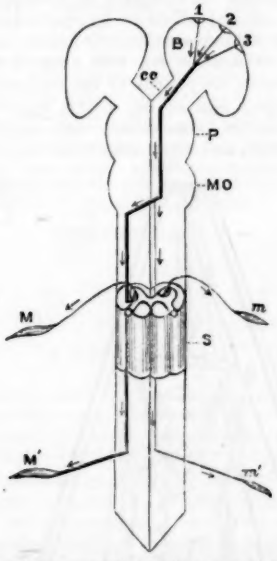
these cannot be invariably relied upon. The plantar, the cremasteric, the abdominal, including the epigastric, and the gluteal, are amongst the best known, and of these probably the plantar and abdominal are the most constantly found. But, besides being often absent, the amount of muscular movement that follows the afferent stimulus is very variable; so that here, again, it is impossible to define the normal. As, however, these reflexes are represented on each side of the body, if the disease we are investigating is unilateral we may compare the reactions of the affected with the unaffected side. Hence it is more especially in brain disease, where the lesion usually produces its effects on one side only, that we can with greatest safety call the skin reflexes to our aid.

In addition to the superficial, there are so-called deep reflexes. These are due, not to the irritation of a superficially placed nerve, but to a tap on a tendon or the muscle which acts upon it. In the case of the most useful of all these "reflexes"—viz., the knee-jerk—a slight passive stretching of the quadriceps and its tendon is secured by the leg being allowed to dangle; a sudden tap then on the patellar tendon produces an additional extension of the muscle, and it contracts. It is clear that this phenomenon might be attributed to a true reflex act, the afferent stimulus being applied to

[1] A paper read before the Brixton Medical Society.

the nerves existing in the tendon; or it might be due to the direct contraction of the quadriceps, owing to its being suddenly put on the stretch. Both these views are held, the latter being that most in favour with our countrymen. The main argument against the movement being due to reflex action depends upon the time which intervenes between the tap on the tendon and the contraction of the muscle. The time which true reflexes require being known, it is argued that the period required for the knee-jerk is far too short to allow of any other explanation than that it is due to direct local action on the muscle and its tendon. I shall not pursue this question any further, because it does not affect the value of such phenomena at the bedside. Whichever be the true explanation, the absence of the knee-jerk indicates disease of the reflex arc (i.e., afferent or efferent nerve, or motor cell) specially connected with the quadriceps muscle, or of the muscle itself. For a certain amount of initial tension in the muscle is necessary for the production of muscular contraction when that tension is suddenly increased by a tap. This initial tension or "tone" requires the integrity of the reflex arc. Hence, whether we look upon the tendon reflexes as local phenomena or true reflexes, their presence implies the absence of serious disease in the reflex arc; while their absence shows that one or more of the factors which make up that arc are in an abnormal condition. It is of the utmost importance to keep this fact always in view in clinical investigations, and to form conclusions on the principle that disease either of the afferent or efferent nerve in any part of its course, or of the motor cell, or of the muscle, is sufficient to destroy the tendon phenomena. But, besides abolition of the tendon phenomena, we often have to do with an increase in them, and in yet a further stage with what is called "clonus." As I shall presently explain, increased tendon reflexes are probably due to an increased irritability or explosiveness of the centre in the cord which presides over the reflex arc; and "clonus" simply represents a high degree of this condition. When, for instance, in ankle-clonus the sudden bending of the foot puts the tendo Achillis on the stretch, the muscle contracts; when it ceases to do so, the foot again gives before the flexing force of the investigator's hand, and the tendon again becomes tense, and the muscle contracts, and so on, a series of contractions being the result. Now what gives rise to these increased tendon phenomena and clonus? To explain this it is necessary to consider the connexion which exists between the centres in the spinal cord which preside over these muscular contractions and the higher or cerebral centres (Fig. 2). The motor cells in the anterior cornua of the cord are united to the cells in the motor convolutions of the brain by fibres which run in the anterior and lateral columns of the cord; these fibres, occupying the pyramids in the medulla oblongata, together form the "pyramidal tract." The fibres run uninterruptedly from the brain to the cells of the cord below, and through them all voluntary acts are performed. When considering the diagnostic value of the reflexes, it is all-important to remember that the fibres of the pyramidal tract possess a marked controlling influence upon the cells of the anterior cornu; they "inhibit" their action. This is proved by the fact that if the pyramidal tract be divided at any level, the reflex acts occurring below that level are exaggerated, but not those above it. So that in health certain nerve currents must continually traverse the fibres of the pyramidal tract and lessen the irritability of the motor cells in the cord. This being so, it stands to reason that the controlling influence must be very variable, not only in different persons, but in the same person at different times. For the condition of all organs is liable to vary under altered circumstances of health and activity, and the central nervous system is as liable to such alterations as other organs, or even more so. Moreover, the functional activity and power of the brain is no doubt congenitally different in different individuals. If, then, the brain inhibits the cells in the cord, it is clear that the degree of inhibition must be very variable. When to this is added a similar variability in the motor centres in the cord, one must be prepared to find that there is no stereotyped degree of reflex action which we can set up as the normal. This conclusion is easily verified at the bedside. For if we test the reflexes of people who certainly have no nerve disease, we find that they present great variety. And this is observable much more in the way of excess than of diminution. An absence of reflex, or at any rate of a deep reflex, such as the patellar, is of much greater import than its exaggeration. Indeed, so rarely is the knee-jerk absent in people free from disease of nerve or muscle, that one may almost act upon the presumption that its absence proves disease. Its exaggeration, on the contrary, is not necessary evidence of anything more than a functional alteration. Even clonus may be present without gross changes in nerve or muscle. I must, however, again call special attention to the fact that what has been said of the absence of the patellar reflex is not applicable to the superficial reflexes: the latter are not so invariably present as the former. Moreover, for some unexplained reason they do not necessarily behave in the same manner as the deep reflexes in the presence of alterations in the pyramidal tract. For instance, in hemiplegia, when the deep reflexes are increased, the superficial are usually absent or diminished. We do not at present know the reason why this is so, but we must accept the fact and act upon it.

FIG. 2.



Diagrammatic representation of the course of the pyramidal tract arising from the motor centres in the right hemisphere of the brain (after Byrom Bramwell). B, Right hemisphere of brain. 1, 2, 3, Generating motor centres in the right hemisphere. C C, Crus cerebri. P, Pons Varolii. M O, Medulla oblongata. S, Segment of spinal cord. At the lower end of the medulla the motor tract divides. The larger subdivision decussates and passes down the opposite side of the cord in the lateral column; it is distributed to the muscles M M' on the left side of the body. The smaller subdivision passes down in the anterior column of the same side of the cord, and is distributed to muscles *m m'* on the right side of the body.

Before passing to what I have to say about the condition of the reflexes under pathological conditions, it will be well to sum up the most important points to be remembered as regards their anatomy and physiology. 1. All reflexes, whether superficial or deep, depend upon the integrity of certain reflex arcs and of the muscles connected with them. 2. These arcs consist of afferent and efferent nerves, which meet in nerve cells, the latter being situated in the anterior cornua of the cord. 3. The pyramidal tract passes down from the centres of voluntary motion in the cortex of the brain, and forms a junction with the successive strata of motor cells in the anterior cornua. 4. Even in the absence of voluntary movements the pyramidal fibres rein in, as it were, the motor cells in the anterior cornua; so that, while the tract is intact, afferent stimuli are less energetically reflected on to motor nerves than when it is diseased. 5. The energy of this controlling influence is variable in healthy individuals, and in the same individual under altered circumstances; hence, in the matter of reflexes, the normal is a variable quantity. 6. The patellar reflex is almost invariably present in health, but the superficial reflexes are much less constant.

(To be concluded.)

A CASE OF

SEVERE SUBACUTE RHEUMATISM TREATED BY MASSAGE.

By H. W. McCAULLY HAYES, M.R.C.P., L.R.C.S.

H. M——, a strongly built, muscular young man, aged twenty-two, consulted me early in October, suffering from a severe attack of muscular rheumatism. When I saw him he was almost completely crippled. He could not use his arms or hands, nor could he stand. He could not sit up owing to the severe pain in his back, and it was with great difficulty that he could bend his knees. His hips were so painful that he could not bear them touched, and he complained of a severe pain, superficial in character, in the region of the occipito-frontalis muscle. In addition to this he was greatly distressed by pain in the region of the diaphragm, so much so that on some days he suffered agony on coughing or hiccoughing, and was quite unable to take a deep inspiration. His temperature was 99° F. His previous history was decidedly rheumatic, he having suffered from rheumatic attacks on and off for the past three years. His health was very good during the intervals of the attacks, and he used to take a great deal of out-door exercise in the shape of tricycling, tennis, and boating. Last September he spent his holidays on the river and frequently got wet, and two or three days before this attack he felt a little shivery and out of sorts. On examining him, I found that he looked very ill, with a thickly coated tongue and an expression of pain on his face. He was sitting in an easy chair when I saw him, and on my entering the room he attempted to rise, but suffered great pain in doing so. On getting him into bed, I found that almost every joint in his body, besides all the principal groups of muscles, were affected. The joints were slightly swollen, a little redder than usual, and very tender. His shoulders and the muscles in the immediate neighbourhood of the joints were very painful, and the muscles of the forearms were quite useless on account of the pain he suffered when they were used. Both wrist-joints were affected, and the palm of the left hand was exceedingly painful, the middle and ring fingers of the same hand being nearly bent in upon the palm—that hand being quite useless. All the muscles of his back and those round the hip-joint were exceedingly painful. Both knee-joints were affected, the pain being especially severe to the internal condyles. The soles of his feet were exceedingly painful and tender, so much so that he could not bear the slightest pressure upon them, and could not walk. He had a mitral systolic murmur, and the area of cardiac dulness was increased downwards and slightly to the left. Urine, high coloured, acid, with a copious deposit of urates on standing.

The patient had been treated with alkalies in the early part of this attack, but not getting relief I recommended massage, which I performed myself. He did not take any medicine, except a few doses of a mixture containing iodide of potassium, which had to be stopped, because the physiological effects of the iodide manifested themselves very early in his case. I began with a general shampooing over all the painful parts, and at first he could scarcely bear this process at all. The earlier sittings lasted from ten to fifteen minutes, but this was gradually increased, till at the end of the second week each sitting lasted from thirty to forty minutes. The first sign of improvement was that he began to sleep better at night. After this the pain began to pass gradually away from the different parts in the following order:—First, from the muscles of his back and neck, the improvement in this respect being shown by his being able to sit up; then his shoulders and knees got better, and his hip-joints were also much better—in fact, quite comfortable. His wrists did not show much improvement, and, with the palms of his hands and the soles of his feet, resisted treatment for a long time. The pain in the region of the diaphragm was about the last to disappear. The good effects produced by firmly kneading the muscles was shown in this case by the result which followed this procedure when applied to the muscles of the back and neck and to the structures over the large joints. Pétrissage and effleurage were applied to the region of the diaphragm, and combinations of these methods, together with tapotement and friction were applied to the other parts affected. I am glad to say that my patient is now actively employed, and is keeping very well. During the course of massage, which extended over six weeks, hot baths containing washing soda were found very grateful.

Tavistock-road, Westbourne-park, W.

AN IMPROVED APPARATUS FOR SUSPENSION.

By JULIUS ALTHAUS, M.D.

HAVING practised the treatment of locomotor ataxy and other chronic nervous affections by suspension ever since the appearance of Professor Charcot's lecture on the subject in the *Progrès Médical* for Jan. 19th, I soon found that the mode of suspending the patient by the assistant pulling the cord, and keeping him up for several minutes by sheer muscular force, was inconvenient, more especially in the case of heavy men, and where suspension had to be somewhat prolonged. The suspension then takes place by a series of jerks, and one cannot get rid of the apprehension that the assistant might suddenly "let go," and the patient might be injured by a too sudden descent. Morton, in a recent paper in the *New York Medical Record* (April 13th, 1889), also speaks of the cutting of the rope

as unbearable, even to a sound person, when protracted for five minutes.

Under these circumstances, it appeared to me desirable to add to the apparatus employed a mechanical contrivance, by means of which the patient might, even if of great body-weight, be pulled up easily and steadily, without jerks or the employment of much muscular force, and might remain suspended equably the whole time which might be required, without an effort on the part of the assistant. I therefore requested Messrs. Krohne and Sesemann, of Duke-street, Manchester-square, to fix to one of the poles of the tripod a winding-wheel, by means of which the cord could be pulled up and down in an equable manner, avoiding jerks, and be made, by means of a catch, to remain in any position in which it might be required. The accompanying diagram illustrates the contrivance so well that a further description of it is unnecessary. I am obliged to the makers for carrying out this idea in a very neat manner, and I have used the improved apparatus for more than two months with ease and success.

I have now made upwards of 300 suspensions in twenty-nine cases in hospital and private practice; and, although the time which has elapsed since this treatment was inaugurated is as yet too short for a definite opinion on the whole subject to be formed, I am convinced that suspension has already gained a firm footing in the therapeutics of chronic nerve-degenerations. In some of my cases the results have been actually brilliant, in the majority they have been good, while in a minority no benefit has resulted. Occasional failure, however, does not detract from the value of any remedy. In addition to locomotor ataxy and other spinal affections, chronic rheumatism and rheumatoid arthritis, and spasmodic torticollis, appear to be favourably influenced by suspension.

Harley-street.

A CASE OF

MULTIPLE OR PERIPHERAL NEURITIS, DUE TO CHRONIC ARSENICAL POISONING.[1]

BY HENRY M'CLURE, M.D.

MULTIPLE NEURITIS may be due to the poisons of alcohol or other narcotics and stimulants, or to lead, arsenic, copper, and ergot. Of these, the most familiar is that due to alcohol or lead. Of whatever form, the neuritis presents certain characteristic symptoms. Among these, and nearly always present, are pains and abnormal sensations referred to various nerve distributions, described as numbness, tingling, burning, darting, shooting, or lancinating pains. Coldness may be complained of, referred to limited regions, or coldness alternating with heat. The pains may be referred to nerves, muscles, or joints; even symptoms usually referred to ataxia may be present, as "gastric crises," or as if the patient were walking on wool. The special sensory senses may be affected; also the motor, including paralytic, ataxic, and spasmodic phenomena—alterations in electrical reactions; and there may be reflex, vaso-motor, and trophic symptoms present. Of the objective sensory symptoms, the most important from a diagnostic point of view is tenderness of both nerves and muscles; this is a constant and distinctive symptom. The transmission of pain pressure and temperature sensation is delayed. Motor paralysis is, of course, a prominent symptom in multiple neuritis. The nerves first involved are the musculo-spiral and anterior tibial. The electrical responses vary with the amount of inflammation and degeneration in the nerves. Cases of acute poisoning by arsenic followed by neuritis have been reported; but I am not aware of any case having been published of chronic poisoning by this metal producing such a result.

My patient, a lady aged fifty-six, married, and with a large family, had always enjoyed excellent health till eighteen months ago. Since then she had suffered a good deal from pain, and had been treated for gout and rheumatism. When first seen (Sept. 22nd, 1888) she had an appearance of suffering, an unhealthy, muddy-looking complexion, the tongue was thickly coated posteriorly, the appetite very bad, there was obstinate constipation, the pulse was 110, and the temperature normal. For the previous few months she had, as she described, lightning-like pains down the legs, and suffered at intervals of three or four weeks from what seemed an almost typical "gastric crisis." The pain now seemed more fixed in the soles of both feet, which were found to be completely anæsthetic to pricking and pinching. Sensibility was very much blunted on the dorsum of the foot, and less so up the front of the leg; in the latter region the muscles were notably atrophied. There was great unsteadiness of gait she could only maintain the upright position with some difficulty, and swayed sensibly when the eyes were closed In attempting to walk she swayed from side to side, the knees were bent very much, and the toes turned outwards and dropped. On being placed against the wall, with the heels fixed, the toes could not be raised from the floor. The skin of the legs had a glossy appearance, and there was some mottling. Complicated movements could be performed with both hands, and the grasp was fairly strong. Some of the finger-joints were swollen and painful to pressure. Extreme coldness, alternating with heat, were complained of in both feet; these symptoms were also objective. Plantar reflex was abolished; the knee-jerks were exaggerated in both legs; and there was no ankle-clonus. The muscles supplied by the anterior tibial nerve gave no reaction to faradism, and only feebly to the galvanic current; but there was no qualitative change. The eyes reacted to light, but did not accommodate for distance; the pupils were equal and moderately contracted; and the discs seemed normal.

Static electricity by means of a Carré's machine was tried the same day, also general electrisation by friction, and sparks were drawn from the soles of the feet and atrophied muscles, the fibres contracting energetically during the application, the procedure lasting seven minutes. This was repeated for three consecutive days, with the greatest relief to the pain, sensation also being most markedly improved. My patient now had one of her gastric attacks, including severe pain referred to the region of the stomach, nausea (no absolute sickness), and extreme faintness, accompanied by a feeling of unsteadiness even when in bed, objects in the room seeming to rise and fall before her eyes. These symptoms had quite passed off in two days, and she was able to resume the electrical treatment.

Dr. Donald Hood, who happened to be in Cromer at this time, kindly saw the patient with me. Our diagnosis then was an obscure organic lesion of the spinal cord. Strange to say, on this day the patient developed a well-marked "writer's cramp" in the right hand, with total anæsthesia of the tips of the thumb and first two fingers. After this, under static electricity, we had a most encouraging and steady improvement in all the symptoms; the pain had quite gone, the sensation almost completely restored, the general health most markedly better, complexion much clearer, and the appetite excellent. She now complained mostly of a feeling of heaviness and stiffness in the legs, especially at night, and as if a board were tied to her feet. By the middle of November she had improved so much that she could walk without help, and could raise both feet with the heels fixed. There was no pain, the atrophied muscles had notably grown, and to her friends she seemed better than she had been for a year. The power in the hand had also improved. All went well until Dec. 15th, when there was a complete break-down, ushered in by extreme pain and tenderness of the right foot, accompanied by a distinct flush on the outer aspect. There was paresis of both feet, most marked in the right. Pain was present in the left hand, with almost total anæsthesia of the tips of the fingers and inability to close the hand. The extensor muscles of the foot were very tender, and the sensation of pricking and deep pressure were markedly retarded on the soles and front of the leg; above the knee sensation was normal. The muscles supplied by the anterior tibial nerves of both legs gave no response to faradism and slightly exaggerated reactions to galvanism, but no qualitative changes. The knee jerks were diminished. There was also gastric pain and nausea.

For some time I had been reconsidering the diagnosis, and now, after this break-down, I was convinced I had a multiple neuritis to deal with, most probably of toxic origin, and gave a more hopeful prognosis. Alcohol and lead being excluded, my thoughts turned to arsenic. The wall papers were investigated, but gave no result. There happened to

[1] Paper read before the Norwich Medico-Chirurgical Society.

be staying in the house a very intelligent lady, who remembered reading about two years ago some letters in *The Times* of cases of arsenical poisoning at Cooper's-hill College by means of so-called Indian muslins used as curtains and draperies of the rooms. On investigation being made, it was found that the patient had been for nearly two years working with such muslins, tearing them and making them up into covers for sofa-cushions, curtains, and many kinds of art draperies, both for herself and friends. Mr. Bryans, M.B., examined for me some of the muslins, and found undoubted traces of arsenic. I communicated with Dr. Matthews, Demonstrator of Chemistry at Cooper's-hill College, who told me there had been cases of arsenical poisoning there traced to such muslins and cretonnes. I sent this gentleman some of the samples used by my patient, and he told me that he discovered arsenic in two of the samples, one of which contained a small amount, while in the other he found arsenic in considerable quantities, and he had no hesitation in declaring the latter to be dangerous.

Of course the muslins with which the patient was still surrounded were at once got rid of; but she was confined to bed for some days, being quite unable to stand. Iodides and "puralis" water were given and galvanism applied during her stay in the house. She improved gradually, and was able to get to my house in about ten days, when static electricity was again resorted to, with some further improvement; but, the weather getting very cold, she left for Brighton at the end of January, where she was seen by Mr. Bernard Roth and Dr. Uhthoff. She remained under Dr. Uhthoff's care till the middle of March. During her stay at Brighton there was a still further improvement in her condition. Dr. Gowers saw her in London on March 20th, and by permission of Dr. Uhthoff I quote a portion of his letter to him: "I have seen Mrs. H—— this afternoon. There seems to me to be no reason for doubt that Dr. M'Clure's diagnosis is correct. Peripheral neuritis certainly exists. Apart from alcohol, a mineral poison is by far the most probable cause. Spots of pigmentation of the skin is one of the characteristic effects of chronic arsenical poisoning. I have seen it several times in consequence of the long-continued administration of arsenic to prevent bromide rash in epilepsy. No other cause of these symptoms can be traced. Arsenic is the only cause which accounts for the skin pigmentation and the nervous symptoms. It does account perfectly for everything in the case. The exposure to arsenic appears ample. Thus the evidence appears to me overwhelming. Such a case is very rare. I have never seen one like it before, nor do I remember reading of one; but such cases would probably have been misunderstood till recently. All the cases of arsenic paralysis recorded of late years have followed acute arsenical poisoning. The prospect of recovery is good."

Of the usual symptoms of arsenical poisoning the following were absent: with the exception of the periodical attacks referred to, there was no gastric pain or nausea, no irritation of the eyes, no cough or dyspnœa, no typical tongue, no albuminuria, and no arsenic found in the urine. The most important point in the diagnosis as a neuritis, as pointed out by Starr,[2] was the implication of the sensory afferent as well as the motor efferent nerves.

Cromer.

NITRO-GLYCERINE — A SUBSTITUTE FOR ALCOHOL IN CASES OF EMERGENCY.

By JOSEPH B. BURROUGHS, M.D.,
PRESIDENT OF ONTARIO COUNTY MEDICAL SOCIETY, NEW YORK STATE.

IN presenting to the medical profession the subject of nitro-glycerine, my object is to bring to their attention a drug that in its effects, rapidity of action, size of dose, and lack of taste when taken in water, cannot be surpassed. Greater than these properties, desirable as they are, is the additional one, that in nitro-glycerine we possess an efficient substitute for alcohol in every case of emergency. Indeed, in some cases, after alcohol had failed, nitro-glycerine succeeded.

History.—With so many desirable qualities, one would suppose it needed only to have been introduced to the profession to become at once popular. Unlike cocaine, which was used universally within a few months after its first announcement, nitro-glycerine has been before the profession over thirty years, and yet, until the last few years, it was seldom or never mentioned in medical literature. In 1858 Field introduced it as a remedy in neuralgia and nervous affections. The Academy of Science of Paris in 1875 carefully investigated its physiological properties and cautioned physicians against using it in large doses. Four years later Dr. Murrell recommended its use as a successful means in the relief of the agony of neuralgia of the heart (angina pectoris). For a number of years favourable results were reported in our magazines. Gradually, as physicians became more acquainted with its effects, it was tried in other diseases, where relief was hoped for by increasing the volume of the pulse. In July, 1885, I published a brief article in the *Therapeutic Gazette* of Philadelphia, Penn., recommending the drug as an efficient substitute for alcohol in cases of emergency. The article was widely copied. THE LANCET suggested to physicians to investigate this new claim for the drug, and see if it could be used or recommended.

Preparation and Dose.—Druggists usually keep it in stock in a 10 per cent. solution, which strength is non-explosive. From this 10 per cent. solution they prepare a 1 per cent. solution for the use of the profession, at a cost of eight cents an ounce, which is one cent for sixty doses. It is also sold in the form of pills, perles, and triturates. The liquid form I have found the handiest, and least liable to change and become worthless. Care should be taken to keep the bottle tightly corked, or by evaporation the strength might be increased. Although nitro-glycerine is not decomposed by the acid of the stomach, yet, as nitrites as a class are to a great extent rendered inert by acids, it would be as well not to use an acid with nitro-glycerine in the same prescription. The dose is one drop of a 1 per cent. solution. This may be taken in water into the stomach, the physician dropping ten drops into a tumbler, and adding ten teaspoonfuls of water, one teaspoonful now representing one drop of the remedy. If there is need of great haste, or if the patient cannot swallow from being unconscious, one drop can be placed within the lower lip or upon the tongue by means of a dropper or pipette, which many physicians now carry in their case of remedies. The drug may be given hypodermically; but so rapid is its absorption through the mucous membrane of the mouth that, unless the syringe should happen to be filled and ready for use, I doubt if any time would be gained by the use of the needle. Patients are not all alike in the amount required to produce an effect—some requiring less than one drop, others requiring three or four drops to produce the same effect; the usual dose, however, is one drop. Patients also differ in the duration of the effect of the drug. Usually the effect lasts three or four hours, but in a few cases the effect had ceased in twenty or thirty minutes. Permit me to say here that the name nitro-glycerine is so associated in the minds of the people with dynamite and with gunpowder that in many cases where the physician has to give a name for what he prescribes it might be wisdom to call the remedy by its less terrorising names—glovoin, trinitrin.

Physiological Effects.—Dropped on the tongue, the effect is the more rapid, as there is no dilution. By way of the stomach, unless greatly diluted, the effect is apparent in a few minutes, the pulse being increased from 10 to 20 beats, and becoming full and regular. In a few cases there is a slight headache, lasting for a few minutes. In larger doses the face becomes flushed, a severe headache is experienced, accompanied with a feeling of fulness, singing in the ears, flashes before the eyes, and all the symptoms of an increased supply of blood to the brain. On account of this effect on the cerebral circulation, care should be taken in administering the remedy to the aged, as the sudden expansion of the cerebral vessels might cause a rupture of their weakened calcareous walls. Its action on the heart is through the sympathetic nervous system. The vagus nerve and the vaso-contractor nerves of the vaso-motor nervous system are depressed, partially paralysed. This allows the extensive system of arterioles to dilate, and thus give room within their walls for a greater amount of blood to flow. Thus this enlarged reservoir of tubes relieves the heart of the work of forcing the current through narrow contracted tubes. This and the vagus nerve being depressed permits the heart to beat freer, fuller, and more rapidly.

Antagonists.—In case of a poisonous dose of nitro-glycerine

[2] Ann. Univers. Med. Sciences, vol. i.

having been taken, we should select as antidotes such drugs as act in an opposite manner upon the vaso-motor nerves to that of nitro-glycerine. Our object should be to cause a contraction of the arterioles. The most desirable agents for this purpose are strychnine, ergot, and belladonna. These agents should be given hypodermically, in case of poisoning, as they diffuse much more slowly than nitro-glycerine. Everything should be done to save the brain from injury by the engorgement of the bloodvessels (hyperæmia). In one case I gave instant relief from the agonising headache by having the patient place his clasped hands behind his neck and press the thumbs against the throbbing carotid arteries. (See Case 8.)

ACTION COMPARED BETWEEN NITRO-GLYCERINE AND THAT OF OTHER DRUGS.

1. *Digitalis* (foxglove). — Comparing nitro-glycerine and digitalis, we find both increase the force of the heart's beat. In all other respects they are unlike, and are antagonistic. Digitalis *increases* the action of the vagus nerve and the contractor nerves of the circulatory system. Nitro-glycerine *diminishes* the action of those nerves. Digitalis increases the force of the heart's action by diminishing the rapidity of the pulse. Nitro-glycerine increases the force of the heart's action by increasing the rapidity of the pulse. Do either or both *strengthen* the heart? If so, how? The only agencies that can directly strengthen an organ are such substances as enter into the composition of that organ. Hence, as digitalis and nitro-glycerine do not enter into the composition of the heart, it follows that, if they are tonics to the heart, they must be such indirectly. Now, the question is, how can they indirectly strengthen the heart? The duration of each 72 pulsations and rests per minute of the heart in health may be divided into five parts, the first two parts (two-fifth) being occupied in the contraction, the actual forcing of the flow of blood. This is followed by the remaining three parts (three-fifths), a period of *passive rest*, in which the heart muscles take no part in the filling of the chambers of the heart with blood. During the contraction, the working period of the heart, the body, as a whole, receives its fresh supply of food-ladened blood; but it is during the passive-rest period, when even the smallest arteriole of the heart lies wide open, that every fibre of the heart's own muscular walls is relaxed, quietly drinking in its own life- and strength-giving food. Thus in every twenty-five hours the heart works ten hours, and takes fifteen hours for rest and for obtaining food from the blood. A singular fact is, that, no matter how rapid the pulse may be, the actual time occupied in each contraction of the heart is always the same. Hence, the rest period is the one that varies. Thus, a pulse of 140 shows the heart is working twice ten hours out of every twenty-five, and resting only five hours. This is the reason why a pulse of 160, if continued, means certain death. Not that the heart cannot beat thus rapidly from its nature, but 160 beats, if continued, means nearly twenty-three hours' work, and only two out of every twenty-five given to rest and the obtaining of food. The richer the blood and the more nourishing the diet, the longer the heart will maintain this rapidity of action; but in any case, if the pulse is not reduced in rapidity, it will cease. With these facts before us, we may the more readily understand how digitalis, and possibly nitro-glycerine, can strengthen the heart. Digitalis, we have stated, increases the action of the vagus nerve, which nerve causes the influence of the contractor nerves of the sympathetic system to relax their hold upon the muscles of the heart, and thus permit it to rest and obtain a little food and strength. Digitalis, by increasing the power of the vagus nerve, increases its power over the sympathetic contractor nerves of the heart, and thus a little prolongs each rest period (diastole) of the heart. As the rest periods are increased in length, nearer to normal, the heart receives more time to obtain food, and with food strength. Thus, indirectly, digitalis is a heart tonic, and not only increases the force but also the actual strength of the heart's muscles. Nitro-glycerine, we have stated, increases the rapidity and volume of the pulse. Does it also increase the strength of the heart, acting as it does upon the same nerves, but in the opposite manner to digitalis? The object one has in view in giving either drug is to cause an abnormal pulse to become soft, but full and firm, and nearer the normal 72 beats per minute. This digitalis does when the pulse is *above* normal, and nitro-glycerine when the pulse is *below* normal. When the pulse is below normal (say 40 to the minute), it is evident that, if the heart is weak, it cannot be from a lack of rest, as it would be working only five hours and resting nearly twenty hours each twenty-five hours. The weakness must be due to *over-rest:* the blood remaining too long a time among the heart's muscular fibres, before it is squeezed out by way of the veins and a fresh supply rich with food flows on by way of the arteries. Nitro-glycerine, by increasing the rapidity of the pulse (and probably dilatation of the arterioles of the heart, as well as those of the general system), causes the venous blood to be expelled and the arterial blood to flow among and through the heart's muscles more frequently. We are not to forget that the usefulness of either drug as a heart tonic ends when the full regular pulse reaches the normal 72. Digitalis, carrying the pulse below normal, enters the field of stagnation. Nitro-glycerine, allowing the pulse to fly above normal, encroaches upon the rest period of the heart.

Nitrite of Amyl.—Nitrite of amyl and nitro-glycerine are similar in their action and effects. The former can be given more rapidly, as simply breathing a few drops from a handkerchief is almost instantly felt by the fulness in the brain. The effect lasts but a short time, and hence nitro-glycerine is to be preferred in most cases. Let me say here that in one or two cases I have found nitro-glycerine had to be repeated every half-hour to prevent the pulse from disappearing at the wrist, the patient apparently dying. Here, I give in place of the nitro-glycerine three or four grains of salicylate of ammonia every two hours, the pulse returning in a short time after the first dose, and the syncope being prevented. The remedy has a very pleasant taste, and readily dissolves and quickly absorbs when placed on the tongue.

Alcohol and Ether.—Alcohol and ether are similar in their action and effects to nitro-glycerine, and also to each other. All three produce, first, a period of excitement when the heart beats quicker and fuller, and the brain, from the increased supply of blood, is more active. With all three this first stage, or effect, is followed by a second effect—the stage of unconsciousness. With ether this first stage is soon reached and passed, and the second stage—that of unconsciousness—is rapidly entered. With alcohol the first period is of longer duration, larger quantities of the drug and a greater length of time being required to pass from the first stage into that of the second stage. Nitro-glycerine, compared to the rapidity of action of the other two drugs, enters the first stage almost instantly, and the stage of unconsciousness only after a poisonous dose is taken. Hence ether is preferred to alcohol where an anæsthetic is required, because ether quickly passes the first stage and enters the second. Alcohol is preferred to ether in cases of emergency, where the effect on the circulation is what is desired, and not the second stage. Continuing this line of reasoning, nitro-glycerine should be preferred to alcohol in every case of emergency, because not only does it act in the same way as alcohol, but nitro-glycerine acts with greater rapidity, can be given during unconsciousness, is almost tasteless in water, one drop is equal to an ounce of brandy, and last, but not least, with many patients it cannot create or arouse a slumbering appetite for the drug.

(To be concluded.)

FIBRO-MYXOMA OF THE DUODENUM, PRODUCING EXTREME DILATATION OF THIS AND OF THE STOMACH.

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SARAH D——, aged twenty-eight, married, was sent to me by Mr. J. W. Taylor, of the Women's Hospital, for my opinion as to whether she were or were not a suitable case on which to perform Loreta's operation of dilating the pylorus. As she was considerably emaciated, it was thought advisable first to endeavour to improve her condition by artificial feeding. Through the courtesy of Sir Walter Foster, she was therefore admitted into the General Hospital under my care on Feb. 23rd, 1888.

The family history of the patient was stated to have been exceptionally good. There had been no phthisis or malignant

disease. All her grand-parents were over seventy at death. Both parents were alive and healthy. The patient herself was one of thirteen, only two of whom were dead, one dying in childhood and the other from an accident. There was no history of previous illness. The patient had been married seven years, but had had no children or miscarriage. The present illness commenced two years ago as an aching, heavy, and continual pain in the epigastrium and between the shoulders, which was worse after food and at night. Vomiting soon arose, usually occurring towards night; this gave great relief to the pain. After treatment for six weeks at the General Dispensary both these symptoms ceased, and she remained free from them for fifteen months. But during the last week of July, 1887, they returned in exactly the same manner as previously, and never again left her, though the vomiting gradually became less severe and frequent, and on admission occurred about once in four days, when three or four copious ejections took place. The pain at first was easiest when lying on her left side, and at this period she was unable to lie on her right at all on account of the quantity of fluid which then rolled about; but on admission the pain was easiest when lying on her right side. The bowels were as a rule costive, and previously to a vomiting attack the abdomen was distended; there was, however, no flatulent distension after food.

On admission the patient had an appearance of moderate health; she had evidently undergone much recent wasting, but had no cachectic facies. The tongue was moist, though lightly coated over its basic half with a greyish-white fur. The appetite was fair, yet somewhat fanciful. Pulse 96, regular, but small. The lungs and urine were normal. The temperature was usually subnormal. The liver dulness began in the fourth space, and the heart's apex beat in the corresponding one, three-quarters of an inch internal to the left nipple line. The whole of the abdomen, from the sixth costal space on the right, the ensiform, and the sixth cartilage on the left, was occupied by an enormously dilated stomach, the lowermost portion of which impinged on the pubes. It filled the whole of the left lumbar region, but did not reach down into the right, though the tympanic note of the stomach extended well to the right of the right nipple line. The dependent portions gave the note of fluid dulness. A stiff stomach tube was passed twenty-seven inches, and would have gone farther had it been longer. The vomit caused by its passage (eighty-two ounces) was of the usual dull, bilious-green variety, was not frothy or fermented, and had no sarcinæ or excess of mucus.

March 3rd: Up to this date she was eating the hospital milk diet fairly well. In the ten days she had gained 1 lb. (weight now 6 st. 6 lb.), and had vomited thirty ounces. The food by mouth was now restricted to an hourly dose of one ounce, and enemata of peptonised meat juice and milk (an ounce of each) were administered four times daily. The stomach was also ordered to be washed out every day at the same hour with the syphon tube. Eighty-eight ounces of a green nauseous-smelling fluid were removed on the first occasion.—10th: After washing out the stomach the abdomen was almost concave and the superior spines stood out prominently. It was quite flaccid, and nowhere tender to firm palpation. The ascending colon was felt as an empty cord. In the position of the sigmoid flexure were two (fæcal) nodules, and in the right iliac fossa was much movable doughy fulness, probably also fæcal. There was undue resistance and pulsation on both sides of the median line just above the umbilicus, but no definite tumour could be felt there.—19th: The vomit contained very little albumen and was strongly acid, though no free hydrochloric acid could be detected with the methyl-violet test, or lactic acid with ferric chloride, or peptones with Fehling's solution, while nitric acid gave the reaction for albumen.—31st: The stomach fluid removed was strongly acid, and gave the reactions both for albumen and peptone; it always contained bile in quantity, sometimes yellow, usually green; its removal always afforded much relief. There appeared to be a definite, hard, solid mass, about two inches square, to the right of the middle line, its lower edge being slightly above the level of the umbilicus; it moved with respiration and was tender. The patient also complained of tenderness and pain around the umbilicus.—April 1st: Trace of peptone in the fluid; albumen also.—10th: For two or three days at this period she suffered from anæmic delirium and had to be transferred to a special ward.—16th: Stool clay-coloured; as a rule the stools have been fairly normal in colour.—May 23rd: Death. Her weight decreased steadily throughout, and was only 4st. 9lb. on May 17th.

Post-mortem report. (For this I am indebted to Dr. G. F. Crooke, pathologist to the hospital.)—Small, spare subject, extremely emaciated. On opening the abdomen, the stomach and first and second portions of the duodenum were remarkably dilated, forming a double syphon-shaped curve, the lower margin of which, corresponding to the lower border of the pyloric half of the stomach, reached downwards in the middle line as far as the brim of the pelvis. The cardiac end completely occupied the left hypochondrium; the pylorus, with the first and second portions of the duodenum, formed the upper and lower limbs of the second syphon-like curve. The dilatation of the duodenum ended somewhat abruptly at the commencement of the third part, and attached posteriorly and to the right side of this portion was a hard fibrous mass of growth, shaped somewhat like a horse-chestnut, but three times as large. On opening the duodenum, a pit-like depression was seen in the mucous membrane, admitting a grooved director for an inch and a half into the growth. This sinus-like passage appeared to have a smooth lining. On section, the growth presented a firm fibrous structure, resembling scirrhus. The measurement of the double curve when the stomach and duodenum were emptied of their contents was 29½ in., and might be divided into two portions—viz., the measurement of the dilated stomach itself (16½ in.) and that formed by the first and second portions of the duodenum (13 in.). The walls of all these dilated portions were excessively thinned. The growth itself was lying closely applied to the spinal column, its greater portion being to the right of the median line. From before, it was entirely hidden by the gut. Immediately opposite the growth the calibre of the gut was somewhat narrowed, though still capable of freely admitting two fingers. There was no special thickening or induration of the duodenal wall by the growth, this latter seeming, except for the above-mentioned sinus, to be but loosely connected with the intestine. In fact, the stricture was evidently more mechanical than organic. As the growth increased, it apparently forced forward the posterior wall of the firmly fixed duodenum against its anterior one, thus more or less occluding its lumen. The peristalsis in the immediate neighbourhood would no doubt also be seriously impaired. Microscopically, the growth was a fibro-myxoma, in which unstriped muscle cells were to be found, and at the point of its connexion with the gut by the sinus referred to it reached the submucous tissue. At the depression where the sinus apparently opened into the duodenum the mucous membrane was much atrophied. The sinus had smooth margins covered with flattened cells; otherwise there was nothing special to note. No glandular elements were found in the growth. There were evidences of a previous peritonitis in the adhesions between the large omentum and the posterior wall of the stomach to the small intestines, which must have effectually prevented any attempt of the dilated organs to regain their normal character. The rest of the body had no noteworthy pathology.

Remarks.—1. The diagnosis made during life was some form of pyloric stricture, with anomalous signs and symptoms. Against scirrhus were the patient's age, her lack of cachexia, the cessation of symptoms for fifteen months, and the absence of lancinating or other severe pain. No free HCl was ever found, though the stomach contents were tested for this on several occasions, both by methyl-violet and by Gunzburg's test of phloro-glucine-vanillin, as recommended by Germain Sée; but the absence of this is probably valueless as an evidence of carcinoma. Against simple stricture and that resulting from gastric ulcer was the steady and rapid loss of weight, although quite sufficient nourishment was retained by the rectum to support life. I well remember one of Dr. John Harley's patients, who maintained good health and was an active assistant in the ward for, at any rate, eighteen months after he had ceased to take food by the mouth. Neither were there at any time the symptoms of gastric ulcer, for the vomiting from the commencement occurred only once a day, and bore no special relation to food irritation, being usually at night, when the stomach, unable to pass food through the duodenum, had to relieve itself of the accumulated meals of the day by means of the mouth. 2. The unusual extent of the dilatation to the right—well to the right of the right nipple line—which was noted by several observers, and the constant presence of a considerable quantity of bile in the vomit, ought to have led one to conclude that the seat of obstruction was below the opening of the common bile duct. The position of the growth, too, immediately above the

umbilicus, was difficult to explain on the supposition of its being merely pyloric. That a dilated stomach will drag down the pylorus is doubtless true, as indeed happened markedly in this case; but, granted that this was the position of the stricture, how could the large dilated area above and to the right of the growth be explained? for the enlargement should have been then confined to the left of the obstruction if it had been purely stomachic. However, during life the tumour was indistinct and vague, and its very existence was sometimes doubted. 3. Washing out the stomach appeared to increase the loss of flesh. During the first ten days of hospital life the patient was on milk diet, and gained one pound. In the next week, when each day the stomach was washed out once, and one pint of milk and beef-tea with four enemata of meat juice and milk (an ounce of each) were given daily, she lost eleven pounds, though she obtained great relief from the lavage, which caused her but little inconvenience. Some of this loss was probably due to insufficiency of nourishment, for during the next week, when the enemata were given eight times, she only lost three pounds. 4. There was never any serious question of operation after her admission, for she lost ground steadily, and was never in a condition to have withstood a grave disturbance. But in the light of the necropsy it is quite evident that such a procedure would have been wise and hopeful earlier. Indeed, it might have been limited to the simple severance of the pedicle by which the growth was united to the gut, and so set free the latter from the fixation produced by the former. But there would have been no special difficulty in the removal of the tumour. 5. The peritonitic adhesions were secondary to the dilatation. They were most likely due to the marasmus; this would allow effusion into the peritoneal cavity, just as it allows œdema of the cellular tissues to take place; then the extreme sluggishness and atonicity of the bowels—peristalsis being almost absent—suffered the effusion to produce adhesions between them. 6. The origin of the growth is obscure. The most reasonable supposition seems to be that there was a congenital hyperplasia of one of Lieberkühn's crypts (which are largest in the duodenum) or of a gland of Brunner (these are, however, scanty at the lower end of the duodenum), and that around this unstable structure a fibrous growth took place. 7. This condition is apparently one of great rarity; indeed, I have been unable to meet with any similar one amongst the literature I have searched. Its nearest congeners are those mucous and submucous polypi which occasionally jut so far into the gut as to cause obstruction. But the resemblance does not continue beyond a possible community of origin.

Birmingham.

THE HISTORY AND USE OF ANÆSTHETICS IN MIDWIFERY.

BY FRED. W. ALLWRIGHT, M.D., L.R.C.S.I.

(*Continued from page 984.*)

OBSTETRICAL AND SURGICAL ANÆSTHESIA are, then, although parts of the same process, very different in many respects. The one lies between loss of consciousness and that deep narcotism which is dangerous; the other stops before consciousness is entirely abolished. The one is a fixed condition, attained directly and maintained constantly; the chief characteristic of the other is its mobility—it varies with almost every act of respiration. During different stages of the same labour it is frequently necessary to pass from one to the other, carrying the patient deeper under the anæsthetic as the pain augments, and this is easily done; while to hold her during a considerable period of time in the condition of analgesia is a difficult and delicate task, requiring the greatest care and constant attention. The substances used as anæsthetics of which I shall treat are chloroform, ether, chloral, ethyl bromide, and cocaine.

Chloroform.—The superiority of this substance over ether for the production and maintenance of obstetrical anæsthesia is very certain. The advantages of small quantity, rapidity of action, and pleasantness have carried the suffrages of the world in favour of chloroform against ether—a substance which produces a period of marked excitement, requires a much larger quantity, which is unpleasant to inhale, and for administration requires a special apparatus, or otherwise fills the air of the apartment with its vapour, which is highly inflammable, this fact of the danger of ignition being recognised by Channing; since it will take fire at a distance of fifteen feet, it is a matter demanding serious consideration. Chloroform has one quality which peculiarly fits it for the purpose of the obstetrician—viz., its manageability. This is, of course, dependent upon its power. Speaking from personal experience, during inhalation the effect of a single inspiration can be plainly distinguished, and the importance of the fact in a process where frequent recurring and intermittent pain is to be met is apparent. Ether can receive consideration as an anæsthetic in obstetrics only on the ground that it is the "safer anæsthetic." This statement has been made;[1] but if it be founded upon a surgical basis it has no statistical foundation. Theoretically, ether is the safer anæsthetic, and for that reason it is preferred by the great majority of surgeons in America, while in this country it is gaining ground. Yet its superior safety is not sufficiently apparent to induce the surgeons of France, Germany, and Italy to adopt it. In these countries, with their immense surgical practice, chloroform is almost universally the anæsthetic. Moreover, those who have carefully studied the subject are well convinced that if the mortality of each agent, with the number of administrations, were accurately known, there would be but little difference. The conclusion that we would arrive at is that chloroform is not as fatal or ether as safe as they have been represented. In surgery, to avoid the dangers of chloroform and the disadvantages of ether, a plan has been adopted of combining them together with alcohol and making use of the resulting mixture. The alcohol, chloroform, and ether mixture is used to a large extent in surgical operations, but in obstetrics has not found much favour. Dr. Sansom advised a mixture of one part of chloroform to two of absolute alcohol. Dr. Edis uses a mixture of equal parts of chloroform and ether. Dr. Isaac Brown is in favour of two parts of chloroform and one part of ether, with the addition of eau-de-cologne. Billroth's mixture is one hundred parts of chloroform, thirty of ether, and thirty of alcohol by volume. The combination perhaps most generally used in this country is—alcohol one part, chloroform two parts, and ether three parts. In the above-mentioned mixtures the additions to the chloroform are efficient chiefly as diluents. They therefore obviate one of the great dangers of chloroform, that arising from the sudden inspiration of a too powerful vapour. The only objection to the use of the mixture is the slower production of anæsthesia, rapidity of action being a quality of pure chloroform, which peculiarly adapts it to obstetrics. "The best diluent of chloroform is air."

The dangers of chloroform.—Chloroform being the anæsthetic best adapted for obstetrics, and the one usually preferred in the vast majority of cases, the question we must ask is, What amount of danger is there from its use? The most searching inquiry upon this point is necessary, since time has strengthened, in surgical experience, the strongest objection ever made to obstetric anæsthesia. The highest authorities have recognised the irregularity of chloroform in full doses.[2] A statement of the fact might seem to carry with it an abandonment of the agent. It would probably do so were it not that there is a counterpoise, an experience which can be justly termed immense. The records of that experience have been carefully searched, and every case as closely scrutinised as possible. There has been a good number of cases in which death was imputed to chloroform, but with manifest injustice. Justice and science alike demand that the remedy shall not bear the odium of causing death, unless it has been properly used under circumstances in which it alone could have been the cause of death. It is impossible to give in this article the details of the cases. In some the agent was administered by incompetent persons; in others by the patient herself. Many of them rest on hearsay evidence; the time and place of the occurrence, and names of persons, are entirely lacking. In some cases a severe complication of labour was present, such as convulsions or placenta prævia, which frequently alone is a cause of death. Until quite recently it could be truthfully said that not a single death had ever taken place under chloroform in labour when it was administered by a competent person. There are many circumstances

[1] Parvin, Science and Art of Obstetrics, 1886.
[2] Holmes' Surgery, Am. ed., vol. iii., p. 542.

attending parturition which tend to ward off or prevent danger from the administration of chloroform. Sex is one of these; the records of deaths from this agent shows nearly two men to one woman.[3] The recumbent position of labour is an element of safety. Emotion is eliminated as a factor. Many deaths under anæsthetics have been, without doubt, purely emotional. The suffering woman accepts relief more than willingly; she has no dread of its means. A far stronger element of safety lies in the slow and gradual administration during labour. The danger of a strong impression of chloroform, and of the rapid inhalation of air highly charged with its vapour, was early pointed out; the warning has often been repeated since; yet many deaths from this cause have occurred, and patients have been exposed to danger in this way, as has been seen even in obstetrics. But so few have been the accidents in obstetrical practice, compared with the vast number of patients submitted to anæsthesia, both in natural and operative labour, that these points alone have not seemed satisfactory, and attempts have been made to find in some condition of the parturient woman a special source of safety. Campbell makes a strong plea for the efforts attending labour as the safeguard. The condition of anæsthesia is one of cerebral anæmia; expulsive efforts tend to counteract this. But anæsthesia is something more than anæmia of the brain, and effort is exerted during but a small portion of labour. A better argument may be made for the existence of pain as the element of safety. The record of chloroform mortality shows a very large proportion of deaths amongst those about to undergo an operation, and during operations of a trifling character. A careful study of the subject of accidents from chloroform during parturition justifies the following statements. 1. But one well-authenticated case of death is on record where the administration was by a medical man, and in that case no necropsy was made. 2. Dangerous symptoms have occurred but a very few times, and then almost always from the violation of the rules of proper administration. 3. The danger when chloroform is used only to the extent of mitigation or abolition of the suffering of childbirth is perfectly *nil;* when carried to the surgical degree for obstetric operations, the danger is far below what it is in surgery. 4. No proof can be furnished that the parturient woman enjoys a special immunity from the dangers of anæsthetics, although facts seem to indicate that such exists. Her best safeguard lies in the care and watchfulness of the administrator.

The effects of chloroform upon the contractions of the uterus require brief notice. It has been maintained by much diverse testimony that by chloroform the uterine contractions are not affected, that they are augmented, that they are diminished, and that they are suppressed. Authorities of equal standing could be quoted in support of each of these propositions. The first attempt must be to explain such wide differences of opinion based upon observation of facts, and then to give judgment according to the weight of evidence and the character of the observers. This explanation of such varied and opposite testimony is not difficult in view of the varying circumstances under which, and the individual peculiarities of those to whom, anæsthetics are administered. 1. A temporary cessation of the pains upon commencing inhalation was early observed, and by Simpson, Channing, Siebold, and others was recognised as temporary. It is doubtless largely due to emotional elements, which a little encouragement and time suffice to cause its disappearance; but there can be no doubt that this has by some observers been considered permanent, and caused an adverse judgment of the process. 2. Anæsthesia is much more frequently followed by diminution or cessation of the pains in the early stage of labour than later, when reflex actions are powerfully excited by the descending head. 3. The effect upon the pains will vary according to the depth to which the anæsthetic action is carried. This depends upon the ascending and progressive action of the agents upon the nervous system. If analgesia alone is caused, the uterine contractions are not interfered with; carried deeper, they are diminished in force; and in narcosis they may be entirely suspended. No one who has attempted a difficult version without and with anæsthetics could doubt their power over the uterine contractions. 4. There can be no doubt of the existence of individual peculiarities in this respect. In certain cases small doses will so affect the pains as to compel the abandonment of chloroform. 5. Prolongation of administration, if carried at all beyond the stage of analgesia, has a tendency to weaken the force of the pains and lengthen the intervals between them. Under these varying circumstances it is not surprising that there has not been harmony of opinion among observers. It is a singular fact that very strong testimony as to non-interference of chloroform with the efficiency of the pains has been rendered by strenuous opponents of its administration in normal labour, and by men who have observed it carried to the surgical degree for operations such as severe forceps deliveries and repeated cephalotripsies. Both Depaul and Pajot are positive that chloroform does not exercise any influence upon uterine contractions. A careful review of all the testimony, together with an estimate of its value, based upon the amount of experience and character of those who render it, leads to the following conclusions. 1. The action of chloroform upon the uterine contractions may vary according to the period of labour and the peculiarities of the patient, and especially with the degree to which anæsthesia is carried. 2. A temporary diminution or cessation of uterine action is not at all infrequent. Occasionally, however, chloroform permanently abolishes the pains. 3. Obstetric anæsthesia or analgesia has no effect, as a rule, upon the uterine contractions. 4. In surgical anæsthesia the energy, frequency, and duration of the contractions may be, and generally are, lessened; in deep narcosis uterine action is in abeyance. 5. Upon withdrawal of the anæsthetic, and with the disappearance of the anæsthetic effect, the uterus promptly resumes its functions. 6. The tendency of the agency is, then, towards causing a diminution of uterine action, and this tendency should be kept constantly in mind by the accoucheur.

Influence in promoting hæmorrhage after delivery.—An inquiry as to the influence of chloroform upon the contraction and retraction of the uterus immediately after delivery is closely allied to one as to its effect during labour. That authorities should differ widely upon this point is not surprising when the difficulties which attend a clinical study of it are considered. Hæmorrhage is not an infrequent sequel of labour, and it is evident that the *post hoc* and the *propter hoc* are easily confounded. Blot[4] says: "It has seemed to me that the quantity of blood lost immediately after delivery has been somewhat (*un peu plus*) more abundant than usual." Cazeaux gives but a doubting affirmative answer to the question whether chloroform favours hæmorrhage.[5] Both Hall Davis and Edis state their belief that anæsthesia has a tendency to favour post-partum hæmorrhage. If these expressions are ambiguous, they clearly show that the question is not an easy one even to one of large experience. However diverse opinions may be upon this question, the practitioner may do well to bear in mind in practice the tendency of the agent he is using.

[3] In Snow's statistics, three men to one woman; in Scouttetens', two to one; in Sansom's, twenty-three to ten; in another collection, of 100 cases, sixty-six men to thirty-four women.

[4] Dict. Encycl., art. Anæsthésie obstétricale. [5] Op. cit., p. 955.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

SUICIDE, APPARENTLY BEGUN BY AN ATTEMPT TO CUT OFF THE HEAD FROM BEHIND; SEVERAL STABS IN THE FRONT OF THE CHEST; CUT THROAT; DEATH ON THE SEVENTH DAY.

(Under the care of Mr. HULKE.)

SUICIDAL WOUNDS are so generally inflicted in front that the presence of wounds in the back of the body is *primâ-facie* evidence that they have been inflicted by another person; and it is generally accepted as a valid reason for inferring murder, and not suicide. In this case there could not be any doubt that all the wounds were self-inflicted; unimpeachable evidence was sworn before the coroner that

the man had sent out his mother upon a trivial errand; he had then locked himself in the room in which she had left him alone—securing the door on the inside,—and during her absence had made the attempt to destroy himself, using a sharp shoemaker's knife. The sequence in which the wounds were made is indeterminable, but the presumption is thought to favour the idea that those in the nape and occiput were first inflicted. Their length suggests that the dominant impulse was the intention to cut off the head rather than to pith the spinal cord. This attempt failing, he stabbed himself repeatedly in the chest, and lastly cut his throat, after which the great loss of blood and the collapse of the left lung rendered him powerless to continue his mad efforts. The apprehension of the occurrence of suffocative œdema has led to the recommendation of tracheotomy by some authorities as a rule of practice in wounds of the larynx. Here, the patient being in hospital and skilled aid being always promptly available, it was deemed sufficient to have the apparatus for placing a tube in the air passages at hand, but at no time did the necessity for recourse to this occur. Death was plainly referable to the acute pulmonary complications.

A man aged twenty-eight, a cobbler, was admitted into Founder ward on April 11th, 1889. He had a swarthy, ex-sanguine complexion; his face was deeply scarred by small-pox, and its expression wandering; his voice was reduced to a husky whisper; his clothes were soaked with blood. Crossing the junction of the occiput with the nape of the neck were three deep, jagged, incised wounds. A jagged, incised wound crossed the front of the throat, extending from the posterior border of the left sterno-mastoid muscle to the middle of the right muscle of this name, partially dividing both these muscles, severing the depressors of the hyoid bone, and cutting through the thyroid cartilage a little below the level of its middle. In the right ala of this cartilage was a triangular defect, a piece having been cut out; whilst in the left ala were two deep cuts intersecting one another at the keel formed by the junction of the alæ. Through the above defect in the right ala the respiratory movements of the glottis were plainly apparent. All bleeding from this large wound had ceased except from the right external jugular vein. In the left front of the chest were four wounds—stabs. Of these, two seemed to be superficial, whilst from the others air issued, proving the pleural sac to have been opened. One of these penetrating wounds was in the third costal interspace, about an inch and a half inside the nipple line, whilst the other was in the fourth space in the nipple line. This side of the chest was hyper-resonant, and respiratory sounds were absent except posteriorly at the base, where they were very faint and accompanied with coarse râles.

The wounds on the chest and on the occiput were washed with a solution of carbolic acid in water (5 per cent.), dusted with iodoform, and closed with compresses of boric lint. The wound in the neck was similarly cleansed, and lightly covered with a couple of layers of carbolised gauze.

During the next two days nothing worthy of note occurred, except that his general condition scarcely betrayed the receipt of so many and such severe wounds. He sat up in bed, took nourishment freely, swallowing without difficulty, and passed quiet nights. On the 12th he was sleepless, but on the 13th he slept well. On the 14th at 11 P.M., he sprang suddenly from the bed, knocked down the nurse and the male attendant in charge of him, and tried to escape from the ward. This attempt was prevented; he was secured, put again into bed, and hyoscyamine (the fortieth of a grain) hypodermically given, after which he slept during the rest of the night. The injection was repeated twice in the course of the following forty-eight hours. On the 17th the chest wounds were found to be closed, and that in the throat had contracted. On the 18th, at 3 A.M., he again became restless and violent; at 4.30 A.M. he was slightly convulsed and comatose; and at 7 A.M. death occurred.

At the necropsy on the following day, one of the cuts in the nape was found to have penetrated to the occipito-atloid ligament. The stab in the third intercostal space had pierced the upper lobe of the lung to the depth of three-quarters of an inch. The edges of this wound in the lung were glued together by fresh lymph; the lung around the wound was not solidified. There was not any pleuritic effusion. The lower lobe of this (the left) lung was intensely engorged, and its bronchi were filled with muco-purulent fluid. The right lung was very congested, and it contained several areas plugged with inhaled blood surrounded by excessive engorgement. The laryngeal wound had passed between the false and the true cords. The occurrence of the patches of hæmorrhagic infarction in the right lung only was attributable to the collapse of the left consequent on the opening of the left pleural sac.

The forensic interest of this case is its chief importance, and the justification of its being published.

CROYDON GENERAL HOSPITAL.

REMOVAL OF CALCULUS HAVING A FOREIGN BODY AS NUCLEUS BY SUPRA-PUBIC CYSTOTOMY.

(Under the care of Dr. ADAMS.)

THIS case is one in which a calculus of the bladder formed around a foreign body as the nucleus, and is a good example of what in the male is a comparatively rare mode of formation of stone. Symptoms resembling those produced by a calculus had commenced four years before the date of admission, were relieved by catheterism, and recommenced after an accident to a catheter, the broken part of which was supposed to have been removed. However, on section of the stone after removal the central part was occupied by the bulbous end of a black elastic catheter, the remainder of the concretion consisting of the phosphate of lime and phosphate of magnesia and ammonia which generally constitute the calculous mass deposited on substances introduced into the bladder. Foreign bodies forming a nucleus for stone are not often met with in the male bladder, although they are not infrequent in the female. In the former instance they may be introduced through the urethra, and are usually a portion of bougie or catheter. Of these the museums of most hospitals have specimens. In that of the Royal College of Surgeons there are three of contorted bougies encrusted with phosphates. There is also one in which a brass pin forms the nucleus, another in which a pea occupies the centre, and two in which the phosphatic concretion was deposited upon a mass of margarate and oleate of lime. In these instances the nucleus resulted from the use of solutions of soap for irrigation of the bladder. In this museum, also, there is a stone of more than usual interest, thus described in the catalogue: "A slender piece of steel as the nucleus of a large oval calculus, consisting almost entirely of uric acid. The tendency to the deposit of uric acid must have been exceedingly strong in this individual, since it has not only prevented the deposition of phosphates, but has established and maintained during the whole of the period required for the growth of the calculus a diathesis of a totally opposite character." Foreign bodies introduced from without, usually by a process of ulceration, are of various kinds—lime, pieces of clothing, ligatures, bullets (of which Dixon collected fifteen examples), &c. Various things may pass from the rectum into the bladder. In one of the cases recorded by Surgeon-Major Keegan the nucleus was a long piece of "tilli" stalk, which had entered in this way by a process of ulceration.

H. H——, aged fifty-five years, was admitted on Feb. 28th, 1889, for supposed malignant disease of the bladder. The symptoms dated from four years ago, when he began to notice unusual frequency of micturition, which became more and more painful until two years previously, when he was an in-patient, and was repeatedly, but unsuccessfully, sounded for stone, and finally discharged, passing a catheter for himself. This he continued to do until (he says) the end of the catheter came off in his bladder, and he was re-admitted to the hospital, and the fragment removed by "aspiration" through the urethra. Since this time he had never been well, and had been getting progressively and steadily worse as regards his difficulty of micturition and the pain accompanying the act.

Condition on admission.—Aspect pinched and worn-looking; sallow complexion and eruption of acne rosacea round the nose. Voids his urine every fifteen or twenty minutes, with the most extreme tenesmus, the pain causing him to groan aloud, and being almost continuous. Bowels usually act at the same time loosely, and the motions are very offensive. Urine brownish, smoky-looking; strongly ammoniacal, and alkaline; fetid; sp. gr. 1022; contains much viscid muco-pus and some triple phosphate, which,

after standing for twelve hours, reaches two-thirds of the way up the specimen glass. Limbs feel clammy, and body surface cold.

On passing the catheter after a severe tenesmus, five ounces of fetid residual urine were withdrawn. The bladder was then thoroughly washed out with Thompson's fluid, a morphia suppository given, and a medicine ordered consisting of salicylate of soda, tincture of belladonna, and infusion of buchu. He took milk and farinaceous food.

March 1st.—Had about two hours and a half's rest after washing out the bladder last night, after which the tenesmus &c. returned. Urine yellow; deposit only equal to one-third of specimen; sp. gr. 1020; ammoniacal. Bladder to be washed out night and morning.

3rd.—Much better; slept quietly for three hours after irrigation last night. He still has great tenesmus, and has to pass urine every three-quarters of an hour, except for a time after the use of a catheter. Urine alkaline; faint smell, but not ammoniacal; mucus much less in amount, and flocculent instead of ropy; pale yellow; urea 1·2 per cent. The diarrhœa has ceased. His careworn expression has nearly left him. He still complains of pain in the hypogastric region. The pain and tenesmus in the bladder are worst just when it is emptied by the catheter, but after the washing out is completed he has from two to four hours of comparative comfort.

13th.—Chloroform was given, and a stone felt by Dr. Adams; it measures about two inches in diameter. Condition generally is much improved.

16th.—Chloroform again given. Bladder washed out and distended with twelve ounces of boric lotion; rectal bag introduced and filled with water (nine ounces). The bladder can now be easily distinguished above the pubes. A three-inch incision was made in the linea alba, reaching well down on to the symphysis, and was deepened until the bladder was exposed, looking pale and somewhat glistening. This was fixed with a hook and opened, when the finger at once felt the stone, and scarcely any difficulty was experienced in seizing it with forceps and removing it. Several small fragments were felt and removed; and on exploring the base of the bladder with the finger, a bar was felt to extend across, leaving a shallow pouch behind, in which the stone had rested. The bladder was thoroughly washed out with a Higginson's syringe and boric lotion, a No. 15 drainage-tube inserted, and the upper part of the wound brought together with three silver stitches, which passed through the aponeurosis. A morphia suppository was then administered and the wound dressed. The stone weighed two ounces and thirty grains, and consisted of mixed phosphates or "fusible calculus." It was smooth and convex on one side, where it rested in contact with the bladder, rough and tuberculated and flatter on the other. Its nucleus was seen to be some foreign body. Around this the mixed phosphates were deposited in laminæ.

17th.—All the urine has come through the tube. The wound has been dressed twice, and the patient has been lying on either side alternately. He has had a very comfortable night, and complains only of a little smarting in the wound.

18th.—A smaller drainage-tube was substituted for the one in the bladder, and connected with another which conducted the urine into a bottle in the bed. In this way the man was kept quite dry.

19th.—Wound looking as well as could be wished, union being already nearly completed above, and the lower part beginning to granulate. Has passed thirty-nine ounces of urine, which is healthy and contains only a trace of albumen. Pulse and temperature normal.

22nd.—Drainage-tube taken out.

24th.—A Jacques' catheter was passed per urethram, and left in, as his back was slightly sore from the constant wet. He is otherwise as well as can be wished. Stitches taken out, and wound brought together with strapping.

On the 25th the bladder wound had closed. On the 26th the catheter was left out, but ordered to be passed night and morning. The man left the hospital in April.

CENTRAL LONDON DISTRICT SCHOOL, HANWELL.—The assent of the Local Government Board has been given to the appointment of Mr. Sydney Stephenson to take exclusive charge of the ophthalmic cases in the Central London District Schools at Hanwell. The appointment has been made for one year, at a salary of £500. Mr. Stephenson had charge of a similar outbreak in the schools which belong to the parish of Lambeth, at Norwood.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Laparotomy for Gangrene of Vermiform Appendix.—Tracheotomy for Foreign Body in Bronchus.

THE last ordinary meeting of this Society for the present session was held on June 11th, the President, Sir Edward Sieveking, in the chair.

Sir DYCE DUCKWORTH and Mr. JOHN LANGTON read a paper on removal by operation of a Gangrenous Vermiform Appendix containing a fæcal concretion; secondary laparotomy through the linea alba was performed for suppurative peritonitis, and recovery ensued. The case was that of a boy who exhibited all the symptoms of acute suppuration in the neighbourhood of the cæcum. Operative measures were at once adopted, and revealed a gangrenous condition of the appendix cæci, which was removed together with its contained fæcal concretion. Some days later a median laparotomy was performed in consequence of symptoms pointing to a fresh suppurative peritonitis on the left side. A collection of some ounces of pus was found in a large cavity bounded by agglutinated intestines. The abscess sac, which extended deeply into the pelvic cavity, was drained, and the patient made a complete though somewhat tardy recovery. The authors, in bringing this case forward, laid stress on the importance of early operative interference when suppuration in the neighbourhood of the cæcum was supposed to exist, and all the more so in cases of young adults, as the cause was so often due to the presence of some foreign substance in the appendix. They also advocated the value of making the incision in the right semilunaris, as being more directly situated over the seat of the lesion than one made in the middle line.—Mr. TREVES had read a paper before the Society some time ago on this subject, in which he stated his belief that in the relapsing form of typhlitis the vermiform appendix was always at fault. Operations for this condition might be done at three periods: in the early stage of the trouble; or when suppuration was evident; or when no symptoms existed at the time, but there had been a second or third attack of typhlitis, and there was reason to suspect a third or fourth. In America, operation during the first stage had met with much more favour, and the abdomen had been opened by some surgeons in almost every case; probably in many of these instances recovery would have ensued without operation. One complication that might be met with in the early stage should be borne in mind: pus might spread along the back of the colon, and this would probably happen in cases where the vermiform appendix was abnormally placed. He was in the habit of using the freest possible drainage, employing a tube three-quarters of an inch in diameter; this was necessary, as the wall of the abscess sac was usually irregular, being formed only of intestine. He had removed many appendices during a "lucid interval" between two attacks. In more than one case, after a fourth or fifth attack, the appendix had been removed and no subsequent trouble had taken place. It was dangerous to cut directly down on the appendix, as the cæcum might be adherent to the parietes and might be inadvertently opened. Mr. Treves concluded by emphasising the importance of carefully suturing the vermiform appendix, and by alluding to two cases in which, on account of adhesions, removal of the appendix was a surgical impossibility.—Mr. BENNETT said that where pus was present, or a strong suspicion of it, no doubt operation was needed. He asked where was the best place for the incision, and when the appendix should be dealt with. He had operated on two early cases of suppurative typhlitis; in both there was induration of the parietes up to the semilunar line. He had seen cases in which the suppuration was isolated, opened into the general peritoneal sac from a median incision; he therefore made his incision near the anterior superior spine of the ilium, opened the abscess, and drained thoroughly. One of his cases had healed; the other was on the way to do so. If one went away from the centre of suppuration, there was a danger of unnecessarily opening the general peritoneal sac. Where the gangrenous appendix lay exposed and the general peritoneal cavity was opened, then the former should be removed; but if the appendix was perforated into a loculus and the case was an early one, he thought it better to leave the appendix at least for a

time. The first operation would relieve the distress, while the second could be done when the patient was in a less septic condition and better able to bear the operative interference.—Dr. DOUGLAS POWELL said that when to advise surgical interference was the question for the physician, and he had found it very hard to judge when interference was necessary. He related the case of a patient, a young adult, who was seized with a slight attack of typhlitis, there being fulness and some hardness in the neighbourhood of the cæcum. He was attacked suddenly with rigors, collapse, and abdominal pain in the forenoon, and died the same night. At the necropsy, an abscess, the size of a Maltese orange, was found at the brim of the pelvis in the median line, in communication with a gangrenous vermiform appendix. The signs until the onset of the rigor were extremely vague, and did not point to the existence of a pelvic abscess, which had undoubtedly been in existence for some time.—Mr. PARKER had dealt with three or four cases of this kind, and had used an exploratory incision such as that for tying the external iliac artery, and had found that it answered the purpose very well.—Mr. MORRANT BAKER referred to a case of intestinal obstruction that had been under his care, in which a sense of fluctuation developed in one flank. He cut down, found an abscess, washed it out and drained, and the patient got well. More than three weeks later a relapse occurred, followed by a lethal result, and at the necropsy a pin was found projecting through the vermiform appendix; this had impaled a fæcal concretion and fixed it in position. He thought, on the whole, that in early cases it was better to wait, having opened the abscess, and deal with the vermiform appendix later.—Sir DYCE DUCKWORTH, in reply, said that, though at present there were no definite lines to go upon, a case such as he had related gave much encouragement to physicians to hand over such cases to surgeons. Cases of typhlitis fell into two great categories: one class being confined to the cæcum proper; the other, the graver of the two, to the appendix. The former, not really of great gravity, occurred in youths and young girls, and they gave rise to symptoms like those proper to the early stage of the second group, there being vomiting and collapse, with moderate pyrexia. If these signs increased in spite of treatment, operative measures were needed. It appeared to him that less harm was likely to accrue to the patient from having his abdomen unnecessarily opened than to leave him to run the risk of losing his life from want of interference. Three months before the case he now published occurred he had another, in which no operation was done. Death occurred on the eleventh day, and, post mortem, conditions were found which could have been remedied by operation.—Mr. LANGTON said the case was one among a number the recording of which might lead to the adoption of better practice. He was sure that even if the appendix were in an unusual position it could not readily be got at from the middle line, whereas the linea semilunaris was both near and far enough from the seat of disease. Each case must be judged on its own merits, but the greatest difficulty was to know whether or not peritonitis was present. If suppuration were present, he himself would operate, whilst others advised probing with a grooved needle. He carefully sutured the vermiform appendix, and at the same time applied a loose ligature in addition; this he did because there was such a slight interval between the stump of the appendix and the cæcum. The suppuration was so acute that the intestinal coils separated readily under water-pressure. Though the patient was collapsed before the operation, yet it was far better to have a good look at the vermiform appendix than to treat the case as one of ordinary abscess and simply lay it open. With regard to the inguinal incision, it might be good if the suppuration were very localised, but a fuller and more complete view of the seat of disease was much more likely to lead to a satisfactory solution of the case.

Mr. BRYANT then read a paper on two cases of Partial Obstruction of a Bronchus by a Foreign Body, with remarks on the operation of tracheotomy for its removal. The first case was that of a man aged forty-nine, who the day before his admission into Guy's Hospital in April, 1886, when sucking a button, fell asleep, and awoke gasping. He soon recovered his breath, and, not finding the button, coughed voluntarily to bring it up, and later on took an emetic. He then came to the hospital. On admission there were no physical signs sufficiently marked to suggest the impaction of a foreign body in a bronchus. As the man had an old bronchitis, the diagnosis was difficult. The patient thought he felt the foreign body in the left side of his chest. He refused an operation when it was suggested to him. The man left the hospital twenty-six days after his admission with a cough, but with no clear evidence of the existence of any foreign body in his chest. Some weeks later he entered St. Saviour's Infirmary, and came under the care of Dr. Gross, who reported that he looked very thin and ill. He had a constant cough with profuse expectoration of fetid pus. The right side of the chest was dull, and there were loud mucous râles throughout. He died in ten days from exhaustion. After death the button was found resting on the spur formed by the first bifurcation of the right bronchus. The mucous membrane was ulcerated at the spot. The whole lung was consolidated. The second case was that of a boy aged seven, who three hours before admission into Guy's Hospital in August, 1886, inhaled the mouthpiece of a trumpet. A momentary cough marked the entrance of the foreign body into the lung, and a persisting whistling sound on making a deep inspiratory or expiratory effort with the mouth closed followed its introduction. The physical signs of the presence of the foreign body were very uncertain. On the thirteenth day an operation was performed for the removal of the foreign body, and the whistle was extracted by a pair of forceps, which were introduced five inches and a half from the lower border of the tracheal wound, out of the left bronchus. A rapid recovery ensued. The author deemed these cases of partial obstruction of a bronchus from the presence of a foreign body worthy of record. In both the initial paroxysm of respiratory difficulty which followed the inhalation of the foreign body was brief and feebly marked, and in neither case was there, on the patient's first coming under notice, any laryngeal or respiratory symptom of sufficient weight to support the diagnosis of a foreign body in the trachea or one of its branches. In both cases it was not till the secondary changes had taken place in the lungs from the local irritation caused by the presence of the foreign body that anything like a certain diagnosis could be made from subjective symptoms. From these facts delay in carrying out a correct treatment was thus brought about, which in the first case ended fatally. These cases, the author stated, forcibly illustrated the evil of a procrastinating practice, and more than suggested the expediency of performing the operation of tracheotomy in all cases in which even a suspicion of the presence of a foreign body in the trachea or one of its branches found any support from either the history of the case or the physical phenomena which might be present. The risks of a tracheotomy operation could not be regarded in any way as great, whereas those that attended the presence of a foreign body in the lung were always very grave. The full details of the operation were then given, and the advantages of the dependent position of the head emphasised. The value of the forceps, by means of which in the second case the foreign body was removed from the depth of five and a half inches was then alluded to, and, in conclusion, the importance of an early operation strongly advocated.—Mr. WARRINGTON HAWARD had met with a case in which there was the same difficulty of diagnosis, and partly for the same reason. The foreign body was a piece of tobacco-pipe. Tracheotomy was performed, but the offending substance was not extracted. From its position and character it allowed some air to enter the obstructed bronchus, and it was found at the necropsy to project across and partially obstruct the bronchus of the opposite lung.—Mr. RICKMAN GODLEE asked what was best to be done when something small had been swallowed. He mentioned a case in which a vulcanite tracheotomy tube became detached from its shield, and slipped down the trachea; forty-eight hours later it was extracted with forceps. He had seen several cases of foreign body in the air passages; a blade of wheat, a piece of bone, a tooth, and in one instance a stalk of grass worked its way through the back below the scapula.—Mr. BRYANT, in reply, said that small and light bodies were generally expelled by expiration after tracheotomy; small and heavy ones, if tracheotomised early, would drop out after succussion. A small light body which stuck was the most difficult to deal with; in such a case forceps should be used, either those invented by Gross or the instrument he had handed round.

Mr. MARMADUKE SHEILD showed a case to illustrate the results of Sub-astragaloid Amputation. The operation had been performed in September, 1888, upon the right foot of

a gentleman aged forty-eight, on account of severe perforating ulcer and repeated attacks of cellular inflammation. The result showed a firm fleshy stump with a broad basis. The cicatrix was well in front, and by the aid of an artificial limb, constructed by Messrs. Matthews, the patient, though a heavy man, was able to walk several miles without discomfort, and with hardly a perceptible limp.

OPHTHALMOLOGICAL SOCIETY.

Apparent Movement of Objects associated with Giddiness.—Traumatic Keratalgia.—Penetrating Wound of Globe.—Light Sense in Optic Neuritis.—Sub-conjunctival Cysticercus.

AN ordinary meeting of this Society was held on June 13th, Mr. J. W. Hulke, President, in the chair.

Dr. BEEVOR read a paper on Apparent Movement of Objects associated with Giddiness. He defined the latter as: (1) the apparent movement of objects in definite directions; (2) the sensation of the person himself moving round, and (3) both sensations combined. In certain cases of epilepsy giddiness had been observed as an aura, and in the large majority of these cases the apparent movement of the patient and of objects round him were in the same direction, and generally corresponded to the direction of initial rotation of the head in the fit. In auditory vertigo, in most cases the apparent movement of the patient was in the opposite direction to that of objects round him. With the actual movement of objects before the eyes giddiness was produced, as in the case of a waterfall, but only that part of the retina perceived secondary after-movements which was acted on by the image of the falling body; the after-movements were always in the opposite direction to the real movements. If the eyes were fixed, giddiness was not produced, but the secondary after-movements were, and the author thought it highly probable that the latter could be produced by a complementary sensation of movement in the rods and cones of the retina which had become exhausted by the continued movement.—Dr. COLLINS pointed out that the views enunciated by Dr. Beevor were in opposition to those of Helmholtz and of other authorities.—Mr. SILCOCK asked the author how long the after-sensations lasted which were observed by him after looking at falling water.—Dr. BEEVOR, in reply, though not denying the accuracy of Helmholtz's observations, found it impossible by them to explain how a strip of retina only could be affected by after-movements and not the whole field of vision. The statement of Helmholtz that if the eyes were fixed no giddiness would be produced by the appearance of moving objects did not tally with the experiments of Professor Thompson with two oppositely rotating discs, to which he referred.

Dr. BRONNER read a paper on some forms of Keratalgia, and reminded the Society that Dr. Grandclement had drawn attention to the affection at the Ophthalmological Congress in Paris in 1888. The peculiar feature of these cases was the severe pain resulting from a very small wound of the cornea, which pain recurred usually in the mornings, often for several months. He read notes of some cases, in one of which the pain lasted for eight months, and was so intense that the patient wished to have the eye removed. Relief was obtained by excision of a small macula at the site of the wound. In another patient the pain continued for two years. The author suggested, as treatment for these cases, the use of hot fomentations for several weeks, followed by massage with yellow oxide of mercury ointment. If these remedies failed, the excision of any cicatrix resulting from the wound should be tried.—Dr. BRAILEY suggested the presence of hysteria, though structural lesion he admitted was indicated by the corneal cicatrix.—Mr. J. W. HULKE had frequently observed that the pain and other symptoms were often severer in superficial than in deep wounds of the cornea, and this he thought was due to the large number of nerve terminals that were lacerated in superficial injuries. In the majority of cases in which denudation of epithelium occurred, the latter re-formed rapidly if the eyeball were kept at rest, but in a few cases there was persistence of pain long after apparent healing had taken place.—Dr. COLLINS had watched a number of cases of superficial corneal injury recover under rest and atropine.—Mr. JONATHAN HUTCHINSON, jun., referring to the suggestion of Dr. Bronner that a chemical irritant might be present, related the case of a boy whose cornea was injured by a pen-nib, which stained the wounded tissues with ink. Troublesome keratalgia persisted in spite of treatment.—Mr. NETTLESHIP had long been familiar with cases in which a simple abrasion of the cornea appeared to relapse long after healing. He thought in these instances that the repair was not healthy and vigorous, but that the cicatrix easily broke down. He suggested that destruction of the corneal macula by means of the galvano-cautery might be as efficacious as excision of the cicatrix.

Dr. COLLINS read notes of a case of Penetrating Wound of the Globe, with eyelash in the anterior chamber. The injury occurred to a man aged forty-four, who received a knife-thrust in the eye. A sclero-corneal wound resulted, with prolapse of iris; and when the patient was first seen forty-eight hours after the accident, a cilium was observed lying on the anterior surface of the iris; this was removed without difficulty with a Tyrrell's hook and iridectomy forceps. Rapid recovery ensued, and a month later $V=\frac{6}{12}$ and 1 J. with correction. Three similar cases had been recorded by Messrs. Rockliffe, Power, and Couper.

Mr. BERRY sent a paper, which was read by the Secretary, on the Light Sense in Optic Neuritis. Four cases of double optic neuritis from cerebral disease had been examined. In all the acuity of vision was normal, and when tested with Bjerrum's types no light difference defect was discovered, although the changes seen at the optic papillæ were very pronounced. This fact established a distinction between cases of ordinary optic neuritis and of retro-bulbar neuritis, which was suggestive of different alterations in the nerves in the two diseases.

The SECRETARY also read for Mr. WARNER notes of a case of Subconjunctival Cysticercus, and exhibited drawings of the condition found. The patient was a lad aged seven, and on depressing his right lower lid a smooth ovoid semi-translucent cyst was exposed the size of a large pea, and of a reddish-yellow colour. It was situated between the sclera and conjunctiva, and was freely movable under the latter. When examined by focal light, a small opaque circular spot was visible near the centre of its anterior surface, which cast a shadow in the interior of the cyst. After removal, which was accomplished without difficulty, the microscope revealed in the interior of the sac the head and neck of a bladder worm, with four suckers and a circle of thirty hooklets, large and small, to which succeeded a much-wrinkled neck, sprinkled over with the usual calcareous corpuscular particles. Measurement of the hooklets and the appearance of the walls of the vesicle proved the parasite to be cysticercus cellulosæ, the cystic stage of tænia solium.

The following patients and card-specimens were exhibited:—Dr. COLLINS: Case of Coloboma of Iris and Choroid in each Eye.—Dr. ROCKCLIFFE: Peculiar Condition of the Crystalline Lens.—Mr. TREACHER COLLINS: Microscopic Sections of a Choroidal Neoplasm, presenting structural peculiarities.—Mr. PRINCE: Congenital Tumour of the Cornea.—Mr. HARTRIDGE: Peculiar Appearance at the Macula.—Mr. LAWFORD: Tertiary Syphilitic Ulceration of Conjunctiva.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

Leprosy.

AT a recent meeting of the Society (R. Thorne Thorne, M.D., President, in the chair), a paper was read by Dr. P. S. ABRAHAM on Leprosy, of which the following is an abstract. The author alluded to the numerous articles, letters, &c., on leprosy within the last few years, in the lay and medical Press, and the discussions upon it at the late International Congresses, as well as at the Academies in Paris and New York and in Germany and Russia. With the exception of the case recently brought forward in Dublin, no British Society, however, has lately had the subject under consideration. Its importance in British medicine is, nevertheless, well indicated by the fact that the Royal College of Physicians of London has its "Leprosy Committee," which, in view of the fact that there is increasing evidence respecting the communicability of leprosy, has just recommended a full and searching scientific investigation into the whole matter. He demonstrated on a map the wide prevalence of the disease, particularly in the British Empire, and remarked that it is no wonder that the subject is coming to the front. He hoped that the inquiry urged by the College of Physicians

would be sanctioned by the Government, not only to set at rest, if possible, doubtful points regarding the causation of the disease and the desirability of preventive measures, but also to allay a possible emotional "scare" on the part of the British public. From the insufficiency of data it is difficult to say accurately whether leprosy be really increasing or decreasing in many of our colonies. In many cases we have to rely chiefly upon general impressions. Even the death returns cannot be always depended upon, for they are frequently, as in Jamaica, uncertified by qualified practitioners; and we must remember the natural and universal tendency on the part of the sufferers and their friends to conceal their affliction. The belief in the increasing spread of leprosy at the Cape was so strong that a Leprosy Repression Act was passed in 1884. From the numerous medical reports which he quoted there can be little doubt that the disease is really on the increase in South Africa. It probably is spreading, but in a less marked manner, in the West Indies; and, on the whole, in India, particularly in certain districts. The articles which are now appearing in the Anglo-Indian press indicate that the public mind is becoming somewhat inflamed over the matter; and that there is some cause may be inferred from the large amount of official attention which has been for some time past directed in India to the matter. He quoted the late resolution (September, 1888) of the Indian Government, stating that a measure of rigorous segregation would be repugnant to public opinion, and recommending for the present the grant of medicine and charitable relief in voluntary hospitals and asylums. A short history of leprosy in Hawaii was then given, the latest information having only just come to hand. The author referred to the fate of Father Damien, who was "surely going to his death in the noble discharge of his duty." He pointed out that, in spite of the efforts at isolation, the disease had enormously increased since 1865. The author gave an account of his visit last year to the Norwegian leper asylums, and gave particulars relating to the treatment of the patients, and the views with which he was favoured by Drs. Danielssen, Nickoll, Kaurin, and Daud, who were in charge of the asylums at Bergen, Molde, and Trondhjen. He showed curves indicating the relations between the gradual decrease of the disease throughout the country and the number of patients in the hospitals. With regard to leprosy in Great Britain and Ireland, he referred to cases he had recently seen in London. Through the kindness of Mr. Larder he was able to exhibit to the Society two fairly typical examples of the chief varieties of the disease, one the "nodular dormal form," and the other the so-called "anæsthetic" form. The latter, aged sfxty-four, a meat salesman, was of English parentage, and born in London. When young he had been a sailor in the Mediterranean and in the Baltic, but had not been out of London for upwards of forty-years. Until six years ago he had always enjoyed the best possible health. The author did not admit that this was a case of *de novo* development, though the "period of incubation" was extraordinarily long. The germ must have been dormant, like the "mummy" wheat, for nearly forty years. After referring to the present unsatisfactory nomenclature of varieties, and to the army and navy records of the disease, he, in conclusion, summed up, and, had time allowed, would have adduced arguments in support of the theories that leprosy is caused by the bacillus, that the disease is communicable from person to person, and that segregation is justifiable. Microscopic specimens, prepared by the author, were exhibited, showing the bacillus lepræ scraped from the tongue and mouth of a patient, and sections of dermal nodules, anæsthetic skin, nerves, &c. Many of the references were from hitherto unpublished sources, both private and official.

ISLINGTON MEDICAL SOCIETY.

THE last meeting of the season was held on Tuesday evening last. The chief business of the evening was to hear a statement by Dr. BALLARD, F.R.S., an old member of the Society, of the main results of his recent investigations into the Nature and Causes of Epidemic Diarrhœa, with which our readers are already familiar. His principal conclusions are that the disease is a veritable specific disease, of a febrile nature, and followed very soon in bad cases by very pronounced lesions, especially of the eliminative organs, the stomach and intestines, the epithelium of which is shed; the kidneys, which become affected with glomerular nephritis; the liver, which becomes fatty; and the lungs, which are affected with lobular pneumonia. Pathologically, the disease is most comparable to scarlet fever and to cholera. Convulsions occur in 82 per cent. of bad cases, doubtless of a uræmic character; and albumen is not infrequent. The epidemic wave of the disease is determined mainly by the temperature of the earth. As soon as this reaches 56° at a depth of four feet—it is now about 53°—we may expect the disease to appear more or less extensively, especially among its chief victims—infants fed on artificial food. No special microbe has yet been distinguished, but Dr. Ballard has no doubt of the dependence of the disease on some chemical irritant produced by a microbe in certain loose soils; clay soils are not diarrhœal. Dr. Ballard adduced two or three striking illustrations of the contagiousness of this disease. He advised the boiling of milk, and keeping it, not in cellars, but in a lofty part of the house.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

AN extraordinary meeting of this Society was held on Friday, May 31st, Henry Handford, M.D., M.R.C.P., President, in the chair. Many visitors from neighbouring towns were present.

Syphilis in relation to Marriage.—Mr. LAWSON TAIT opened a discussion on this subject. During the course of his remarks he related the cases of a number of medical men who had had syphilis, and who had subsequently married. Their wives and children were in all cases perfectly healthy. This and other evidence was adduced to show that syphilis was to all intents and purposes a curable disease. Mr. Tait alluded to the germ theory of disease, and considered that it had assumed too great an importance in medical etiology. Finally, Mr. Tait insisted upon the serious nature of gonorrhœa, and expressed the opinion that its after-effects were fraught with greater danger than those of syphilis.

Dr. HANDFORD agreed with Mr. Tait in thinking that syphilis in the present day is milder at all points than that of past generations, and alluded to the well-established fact that the disease manifested symptoms much less severe when occurring among the denizens of west-end clubs in London than when seen in the eastern slums.

Dr. NEWMAN of Stamford, after an expression of thanks to the President and committee for the invitations given to outsiders, referred to the difficulties in the way of coming to accurate conclusions as to the real history of venereal disease. He maintained that the accurate knowledge of family histories extending over one or more generations must be appealed to, rather than the conclusions of the theorist, working often with data scanty in information and limited as to time. He called attention to the great need on the part of the medical profession for careful inquiry and consideration before giving definite advice as to the wisdom or unwisdom of contracting marriage, and closed a few remarks by a review of the teaching which had been given during his student life, contrasting this with the changed opinions which years of practical work had forced upon him.

Dr. BELL TAYLOR considered that syphilis was rapidly becoming a milder disease. The worm-eaten skulls and other grave sequelæ of syphilis were matters of past history. He referred at some length to the milder symptoms more commonly met with, and went on to quote statistics from our own army and navy to prove that even this more or less unimportant disease is rarely transmitted to wives and children. He agreed with Mr. J. Hutchinson, that not more than one in 5000 of our population showed symptoms of hereditary disease.

Dr. BROOKHOUSE agreed with Mr. Tait in his view that the germ theory of disease has acquired a factitious importance which cannot be long maintained. He dissented, however, from his opinion that gonorrhœa is a graver disease than syphilis, though he freely admitted the curability of the latter under careful and sufficiently prolonged treatment. Dr. Brookhouse related one case of tertiary recrudescence, due, as he thought, to neglect in the first instance, which yielded completely to suitable curative measures.

Dr. ELDER considered syphilis to be a graver malady than Mr. Tait wished his hearers to believe. He had seen many

serious cases of the disease, and doubted its universal curability.

Mr. SNELL said that, speaking only from his experience as a public vaccinator, he regretted to say that, so far from agreeing with Mr. Tait and other speakers as to the general mildness of syphilis in infancy and the infrequency of its hereditary transmission, he had found it among the commonest, most deadly, and least amenable to curative treatment of all children's maladies among the poor. Speaking, again, from an extended experience of the disease among adults, he was disposed to agree with Dr. Gowers in his view that, given an adult with a history of acquired syphilis, sufficient duration of life was only required to develop the tertiary malady.

Reviews and Notices of Books.

An Essay on Asphyxia (Apnœa). By GEORGE JOHNSON, M.D. Lond., F.R.C.P., F.R.S., Emeritus Professor of Clinical Medicine, Consulting Physician to King's College Hospital, Physician Extraordinary to Her Majesty the Queen. London: J. & A. Churchill. 1889.

DR. GEORGE JOHNSON has done good service to physiology by pointing out most clearly and succinctly in this essay how great is the difference between the statements made in the physiological text-books recently published and those of older date, both as to the post-mortem appearances after death by asphyxia, and as to the explanations of the phenomena observed in this mode of dying. So-called death by asphyxia is really death by apnœa—i.e., death from an impediment to, or a complete arrest of, *breathing*, and not from pulselessness due to a partial or complete arrest of *circulation*. But the term asphyxia is so generally used to denote death from arrested respiration, whilst apnœa is applied by physiologists to merely one kind of temporary suspension of breathing—namely, that caused by hyper-oxygenation of the blood,—that it is difficult for us now to employ these words in their proper and clearly defined significations. The erroneous views which a misuse of these terms may perpetuate are shown by the author's criticism on the words "local syncope" and "local asphyxia" as used by Dr. Raynaud to explain certain phenomena in the disease named after him.

Dr. Johnson's essay is divided into three sections. The first deals shortly but clearly with the physiology of the circulation, showing the exact parts respectively played therein by the heart, the elastic walls of the large arteries, the muscular coats of the small arteries, and the non-muscular capillaries; the second is the controversial section, treating of the phenomena of asphyxia (apnœa) and its explanation; whilst the concluding part shows how a clear appreciation of these phenomena enables us to understand many pathological conditions in which allied processes come into play. The keynote of the essay is contained in the following statement (p. 7): "On examination after death (by asphyxia) the left auricle and ventricle are found quite empty, and the right cavities of the heart are gorged with blood." Its most interesting chapters discuss the question of the accuracy of this statement, and the hypotheses on the nature of asphyxia based thereon. In the older text-books, such as those of Todd and Bowman, Taylor, and Guy and Ferrier, this condition of the heart is always insisted on; and if it is not true, important inferences as to the cause of death in certain medico-legal cases must be at once corrected; for in the descriptions given since 1875 by Sanderson, Power, Stevenson, and others, "*all* the cavities of the heart" are said to be "filled to distension, the left as well as the right." But in post-mortem examinations after death from asphyxia (apnœa) the left cavities are, almost without an exception, found comparatively empty, and rigor mortis is then assumed by many authorities to be the efficient cause of this condition. Thus, Professor Michael Foster says: "When rigor mortis sets in after death by asphyxia, the left side of the heart is more or less emptied of its contents, but not so the right side"; and he is followed in this explanation by Professors Gerald Yeo and Stirling, so that we may assume that it is generally accepted in our schools. Dr. Johnson brings forward some most cogent arguments from experiments made by Dr. John Reid, Professor Erichsen, and others, and especially by Professor Rutherford in 1873, and witnessed by Dr. Johnson himself, to show that in death by rapid asphyxia the older view as to the emptiness of the left cavities at the time of death is the correct one, and that this emptiness takes place during life, and consequently before rigor mortis has come on. He not only objects to the statement made by modern physiologists that both sides of the heart are equally distended immediately after death, but he advances many reasons to show that the doctrine of cardiac paralysis due to the muscular tissue of the heart's wall being exhausted by the action of the venous blood, which is based on this assumption, cannot be accepted as correct. The marked pallor of the lungs in these cases shows that the arrest of the blood must have occurred before its arrival in the pulmonary capillaries; hence Dr. Johnson has been forced to modify the old theory of Alison as accepted by Reid, to reject their explanation based on a capillary stasis in the lungs, and in its stead to localise the arrest in the terminal branches of the pulmonary artery, just before these have reached the capillaries. "These terminal branches are the muscular-walled arterioles, and their contraction affords an adequate explanation of the arrest of the pulmonary circulation." It is obvious that if Dr. Rutherford's experiments are correctly described, and there seems no reason whatever to doubt this, Dr. Sanderson's experiments must have led him into some error as to the condition of the cavities of the heart, and Dr. Johnson suggests that this may have been caused by the paralysing influence on the vaso-motor nerves of an overdose of curara, by which the normal action of the muscular walls of the arterioles was prevented. Dr. Johnson's essay must make physiologists re-consider their explanations of the process of asphyxia, and re-study the sequence of its phenomena. A comparison of various pathological conditions in cholera, asthma, uræmia, nitrous oxide anæsthesia, &c., in which there is evidence of a "stopcock" action by the muscular walls of the arterioles, is also of great interest to the physiologist and the physician, but the chief value of the work is in the directness and force with which the teaching of modern physiologists on asphyxia is explicitly challenged.

OUR LIBRARY TABLE

A Manual of Nitrous Oxide Anæsthesia. By J. FREDERICK W. SILK, M.D. Pp. 120. London: J. & A. Churchill.—This manual contains over a hundred pages of letterpress and twenty-six illustrations. The opening chapter deals with the properties and preparation of the gas, and includes a short account of the history of its use. By the way, Colton, who was, we believe, an itinerant popular lecturer on chemistry, is described by Dr. Silk as "an American Dentist." In Chapters II. and III. we find the physiology and action of the gas dwelt upon; while Chapter IV. deals with the apparatus employed in storing and for administering nitrous oxide. The preparation of the patient and the apparatus occupy Chapter V. In Chapters VI. and VII. the method of inducing anæsthesia is described at somewhat wearisome length. Dr. Silk's method, if used outside a hospital where rough-and-ready measures may be necessary, does not commend itself. He says: "Allow the face-piece to drop into the lap of the patient or on to the floor." This may be a detail, but attention to details makes all the difference between an agreeably conducted and successful anæsthesia and a nitrous oxide nightmare. In the next

two chapters the "after-effects" are fully considered. The author deems it to be inadvisable to administer gas twice in succession to the same individual if there be a tendency to hysteria or other malady. While caution is inculcated, cardiac disease is not deemed necessarily a contra-indication for gas. We are told that in "the tubercular conditions symptoms [evoked by nitrous oxide] are generally intensified on removal of the face-piece." On reference to Dr. Silk's account of the physiology and pathology of nitrous oxide, we find nothing to explain this statement; and although, we believe, it has been stated more than once before, we have never seen proof advanced for its truth. The closing chapter treats of nitrous oxide when used in general surgery, and is a plea for the wider use of that anæsthetic. We cannot at all agree, however, with Dr. Silk when he proposes to use the transient anæsthesia of laughing gas for operations which require absolute quietude, relaxation of muscles, and a period of time measured by minutes and not seconds. The book would be greatly improved if shorn of some of its wordiness, and if relieved of the crop of misprints and repetitions which disfigure its pages. Taken as a whole, it is fairly abreast of the times, and will prove useful to those who have leisure to read through its pages.

Our Nurses, and the Work they have to do. By H. C. O'NEILL and EDITH A. BARNETT. Ward, Lock and Co.—This is a useful book, and contains a good deal of reliable information. It is, however, somewhat marred by a most didactic style and a tendency to sink to the level of sentimentality which is quite out of place in a manual for nurses. If a nurse is to be any good at all, she must be practical and matter-of-fact in her dealings with her patients, and her religious convictions, whatever they may be, ought to be cultivated by other than books on nursing. Thus chapters like that called "Nursing as a Fine Art" would be much better cut out; but to counterbalance these defects, which a little care and pruning can eliminate from a future edition, we find many chapters of hard-headed common sense, which we commend to professional and amateur nurses alike. The scope of the book embraces a general review of what a nurse should be, how she should learn her work, and how do it. The bedroom of sickness is fully dealt with; diet, cleansing, nurses' observations, and methods of carrying out the doctor's directions; modes of disinfection are also efficiently described. The book, which is pleasantly printed, is, on the whole, a serviceable and compendious manual.

The Journal of Anatomy and Physiology. Conducted by G. M. HUMPHRY, Sir WM. TURNER, and Prof. M'KENDRICK. Vol. XXIII. New Series, Vol. III., Part 3. April, 1889. Williams and Norgate.—This part contains the following articles:—1. R. W. Reid: The Relations between the Superficial Origins of the Spinal Nerves from the Spinal Cord and the Spinous Processes of the Vertebræ; with two plates. 2. J. T. Wilson: Abnormal Distribution of the Nerve to the Quadratus Femoris in Man, with remarks on its significance. 3. Professor Struthers: Some points in the Anatomy of a Megaptera Longimana. 4. Joseph Griffiths: Observations on the Anatomy of the Prostate. 5. Professor Humphry: Observations on the Angle of the Neck of the Thigh-bone, illustrated by some remarkably good photographs. 6. Bertram C. Windle: Origin of Double Monstrosity. 7. R. W. Schufeldt: Contributions to the Comparative Osteology of Arctic and Subarctic Water-birds. 8. T. Shore: Minute Anatomy of the Vagus Nerve in Selachians, with remarks on the segmental value of the Cranial Nerves, with two plates. 9. Miss Gertrude Southall and Dr. Haycraft: An Amylolytic Ferment found in the Mucous Membrane of the Pig. 10. William Anderson and George Makins: Experiments in Cranio-cerebral Topography. 11. Professor Sir W. Turner: Observations on the Stomach in the Xiphoid and Delphinoid Whales. 12. Professor Humphry: Loose bodies in Joints. 13. R. Clarkson and Harry Rainy: Unusual arrangement of the Psoas Muscle. 14. Proceedings of the Anatomical Society of Great Britain and Ireland.

South Africa, and how to reach it by the Castle Line. By E. P. MATHERS, F.R.G.S. Pp. 203. London: Waterlow and Sons. 1889.—This guide-book, issued by the managers of the Castle Line of steamers, contains a considerable amount of information regarding the British possessions in South Africa, but the descriptions seem to have too much of the roseate hue in them. We cannot find anything as to the drawbacks and difficulties which settlers may experience. For instance, in the description of Natal, while there is much said as to the rapid development of the colony and the "unrivalled field" it offers for emigration, we cannot find anything respecting the "horse sickness" which exercises so disastrous an influence on the agricultural portion of the population. The statements, therefore, regarding the great advantages to be gained by emigration must be accepted with caution, but those who have decided to make the experiment will find much useful information as to the means of reaching their intended destination and the distances between the various towns and districts of sunny Africa.

The Different Methods of Lifting and Carrying the Sick and Injured. By N. H. DARWIN, V.M.S. Pp. 32. London and Manchester: Heywood and Co. 1888.—The subject of which this *brochure* treats usually forms a chapter in ambulance lectures and first-aid handbooks. We hardly see the necessity for this addition to the literature of the subject. There do not appear to be any new suggestions on the subject, nor are the descriptions always given in a sufficiently clear and comprehensible manner. Mr. Darwin is of opinion that the subject has not received the full and complete treatment which it deserves, but on that point we would refer him to the fifth lecture of Dr. Lawton Roberts on Ambulance Work.

The Quarterly Journal of Microscopical Science. Edited by Professors LANKESTER, KLEIN, and SEDGWICK. No. 117. May, 1889. London: J. & A. Churchill.—This part contains only one memoir—"The Maturation of the Ovum in the Cape and New Zealand Species of Peripatus," by Lilian Sheldon, Bathurst student, Newnham College. But there is issued with it a valuable and much-needed index of the Quarterly Journal, both of authors and subjects, from the year 1853 to 1888; it extends over eighty pages. There is also a second index, which is devoted to the proceedings of the Dublin Microscopical Club from 1865 to 1880.

Blackie's Modern Cyclopædia. (Bla—Con.)—We have received Vol. II. of this useful work, the first volume of which was noticed in THE LANCET of April 20th. The first word treated in the present volume is "Black-quarter," a kind of apoplectic disease which attacks cattle, and the book closes with a description of Condy's fluid The illustrations are numerous and excellent, and altogether Vol. II. is worthy of its predecessor.

MEETING OF SANITARY INSPECTORS.—Mr. Hugh Alexander, chairman of the Association of Public Sanitary Inspectors of Great Britain, presided at the fourth provincial meeting, held recently, at Chelmsford. The Mayor of the borough welcomed the visitors at the Corn Exchange. Dr. Arthur Downes of Chelmsford gave an address on "Sanitation in Chelmsford," which dealt chiefly with the water-supply and the sewage farm. On the motion of Dr. Alfred Carpenter, a resolution was adopted to the effect that to secure efficient sanitary inspection properly qualified men should be appointed to the position of sanitary inspectors with adequate remuneration, and not subject to dismissal or their salaries diminished without the sanction of the Local Government Board, and that the law should require periodical inspection of districts. The summer meeting of the Association will be held in September at Folkestone.

THE LANCET.

LONDON: SATURDAY, JUNE 22, 1889.

NOTHING could have been better than the advocacy for Hospitals and Hospital Sunday at the Mansion House on Wednesday, either in its medical part as put, in his best style, by Sir ANDREW CLARK, or in its religious aspect by the Right Reverend the Lord Bishop of DERRY. The £100,000 wanted may not yet be forthcoming, but it will not be for want of argument. The Council were well advised in restricting the number of speakers to two, and it was well understood that the main argument would be undertaken by Sir ANDREW CLARK. He took plenty of time. He spoke deliberately, perhaps too quietly to be heard by all his audience. He shirked nothing, not even the much-abused out-patient department. It is, perhaps, the most complete argument for hospitals that has yet been delivered by a responsible physician. He said some things which ordinary speakers might have hesitated to say in illustration of the good done in hospitals to the poor. But he said them so well, and with such accuracy and moderation of statement, that no serious person could have been unaffected by the argument. The wonders wrought for the relief of the poor in hospitals, and through the poor for the relief of the rich, were set forth most powerfully. Without hospitals, and the concentration of experience and skill which they imply, these wonders could not have been wrought. The performance of ovariotomy, almost without fatal results, the successful removal of a tumour of the spinal cord, and cases of operation for injured or gangrenous intestine, including one case in which several inches of gangrenous intestine were successfully removed, were the special instances of high results from hospital work which he adduced, and which might be indefinitely multiplied. The Bishop of Derry effectually demolished the idea that these things are done as *experiments* at the expense of the poor. The poor are the first and the chief persons to benefit by them, and in hospitals have a combination of advantages which the rich and the middle class can scarcely hope for, and may almost envy, with often a convalescent home in the country or the seaside waiting to give them the last finishing strokes of cure. Such amenities must indeed be a great influence for good in all the sad experiences of the poor.

Perhaps the portion of Sir ANDREW CLARK'S address which was most interesting, partly because it was most open to criticism, is that in which he boldly defended the Out-patient Department. This is confessedly the department of hospitals most open to abuse, and many people are of opinion that it is no essential or desirable part of the hospital system, and might with advantage be abolished or cut down very largely in its proportions. We are of the number of those who think that it is being developed too much; and we shall be prepared at the proper time to show to the friends of hospitals that they will act wisely in weighing well the arguments against any further development of this most vulnerable part of the hospital system. But this is only a part, and, in a financial respect, a small part of hospital work. It might be abolished without the hospitals losing their great claim to the support of the charitable and kindly-disposed part of the community. Meantime, Sir ANDREW CLARK defends it boldly. He alleges that the attempts to prove that many unfit persons use it in Manchester and elsewhere have entirely failed, and that no abuse has been shown to be set against the enormous advantages of the out-patient department from an educational point of view. It is here, he maintains, that students learn the minor forms and degrees of disease—the beginnings of it, so to speak. No doubt there is much truth in this, and if the out-patient system is to be curtailed, other ways of teaching common disease and the beginnings of grave disease will have to be found out. We shall not debate this question here. We are entirely with the speaker to this extent, that no abuse of the out-patient department exists to affect the argument for a much more liberal and self-denying support of hospitals than any yet accorded to them. It is only fair to say that many of the hospitals are now so convinced of the liability of this department to abuse that they have an appointed officer to investigate the social position of patients.

Not the least effective part of Sir ANDREW CLARK'S speech was that in which he denounced the evils of Special Hospitals. As the Bishop said, not without an element of humour, we shall not soon hear the last of the "Great Toe Hospital." No doubt the Great Toe is a much suffering though distant and little seen member of the body. But Dean SWIFT himself could not have selected a more effective piece of satire than that in which Sir ANDREW CLARK descanted on the Great Toe specialty. It has many bearings, some of which will only be visible to the initiated, and to those who make a study of the art of using disease, or rather the popular ignorance of disease, for professional purposes. But its chief merit was its happy suggestion of the advantage of a general hospital where a large view can be taken of even the Great Toe and of its intimate relation to the most central parts and functions of the system. If no other good results from this speech, it will be memorable as a severe blow to Special Hospitals. But we hope for many good results and for a veritable increase of contributions. People may have to pinch themselves to give them, but Sir ANDREW CLARK truly says that this is the very essence of an acceptable and charitable service.

There is one direction in which the Council of the Hospital Sunday Fund is entitled to greater confidence than has yet been accorded to it—we mean as an almoner of Legacies. Its large knowledge of the facts touching the work and merits of hospitals is unique; its principles of distribution almost silence complaint. Under these circumstances those who have money to leave for hospitals would do well to entrust it to theHospital Sunday Fund.

In conclusion, we may add that we have distributed 100,000 copies of the abstract of THE LANCET Metropolitan Hospital Sunday Special Supplement, published in our last week's issue—viz.: to ministers of contributing congregations in parcels containing from 1500 to 20 copies in proportion to requirements; 3 copies each to 350 London and sub-

urban newspapers, and to 156 hospitals, dispensaries, convalescent and cottage hospitals; and 15,000 copies to the private addresses of the members of the following London Exchanges (3 copies to each): Stock Exchange, Metal Exchange, Baltic Exchange, Corn Exchange, Commercial Saleerooms, Hop Factors and Merchants', Lloyd's, Coal Exchange.

MR. FREDERICK GREENWOOD'S article upon "Misery in Great Cities" in the *Nineteenth Century* may serve to direct attention to one of the greatest and most pressing problems of the age—viz., how to make life in large cities fairly tolerable to the masses. The steady and enormous tide which is setting in from rural districts to the large centres of population is rapidly converting us into a nation of city-dwellers, and we need to be reminded from time to time that the dangers of such a social state are great, and can never be long left safely out of sight. Mr. GREENWOOD deals mainly with two aspects of this great question—the problem of housing the poor and the problem of facilitating their food supply. On both these heads he has much to say that is sensible and practical, and his suggested remedies are as far as possible removed from anything utopian or socialistic.

The writer points out that the slums and squalid dens that abound in certain districts of the east and south of London "correspond far more than most kind souls are willing to perceive to the measure of depravity and weakness in the human mind; and, at the same time, to the proportion of incapables in a state of society which does not allow its incapables to perish." Every family has its black sheep, every village has its fetid alley, every town has its rookeries (more or less); and it is only the vast extent of the mischief in London and the appalling magnitude of the problems which it suggests that excite so much commiseration and alarm. The natural corollary from this view is the conclusion that any local and spasmodic efforts at ameliorating the evils that exist are destined to only a very limited success, and that permanent advantage is likely to accrue only from measures which tend to raise the general social condition. We believe this is sound sense and good philosophy. The philanthropist, often with the best intentions, frequently fails because his methods really amount to an attempt to annul effects without altering causes. Building decent streets where once were slums is no doubt desirable, but in itself it will effect little permanent improvement so long as the habits and morals of certain sections of the masses incline them rather to the life of slums than to any higher type of existence. We must look for a radical cure rather to education in some of its forms to create a higher ideal of life, and then to organised philanthropic effort and legislation to satisfy the ideal thus created. If we can so train the youth of the necessitous classes that filth and squalor shall be abhorrent to them, we shall have taken the first right step towards an improved social state. Education, Mr. GREENWOOD says truly, has at least one certain and inevitable consequence—viz., the creation of new wants and better tastes: tastes for fresh linen, for order, brightness, and sweetness in the home. Such tastes once created, their satisfaction must be the aim of all enlightened effort. It is here that the enormous difficulty of obtaining decent houses at moderate prices in London makes itself felt. The artisan earns perhaps 30*s.* weekly, according to Mr. GREENWOOD, and if he lives within three or four miles of St. Paul's he will have to pay 8*s.* or 9*s.* a week for fair house accommodation. The result is, that in order that the house may look decent, the cupboard is bare, and bread and tea tend to become more and more the staples of diet. The question arises, Why should not the artisan resort to the suburbs, where rents are lower and the air more healthy? The reply is, that in many cases he is forced to live near his work, that in others the cost of railway fares and the difficulty of dining cheaply tend to annul the advantages which the suggested change might be hoped to effect.

We are thus face to face with the double problem of the ever-increasing rate at which overcrowding is going on, and the growing impatience with its consequences which is surely making itself felt as the result of the educational advance of the day. Mr. GREENWOOD doubts if this problem admits of any satisfactory solution, and is inclined to think that just as there are incurable diseases in the individual organism, so there may be social maladies which defy our best efforts. But he aptly adds that "there are medicines if there is no elixir; and palliatives are not forbidden, though there can be no cure." The furtherance of model lodging-houses, the removal of rookeries, the cheapening of fuel, the encouragement by Government of all inventions and contrivances aiming at making the artisan's home brighter and healthier, and the improvement of cheap cookery are some of the measures suggested. This last point is one of vital importance, and is thus worked out. "Suppose a kitchen built of fair amplitude and with every appointment of economy and cleanliness visible at a glance. From this kitchen (or a dozen such) a smart van moves off at the mid-day hours to go its rounds. The van is broad and deep, like those that are employed in moving furniture from one house to another. Glaringly clean, it is fitted up with trays or other receptacles heated by mineral oil or portable gas. The various receptacles contain three or four kinds of food appropriate to the dinner hour; which kinds are not the same every day, but are always wholesome, always savoury, and such as are well liked of those for whom they are provided."

Social problems are very difficult, and many well-meant efforts aggravate the mischiefs which they are intended to relieve. But if political economy teaches us to beware of plausible propositions and to put no faith in specifics, it must not persuade us to sit with folded hands and idly to lament evils which all recognise. At the worst we can probably do some good and hasten in some small degree the advent of that time of "sweeter manners, purer laws" of which the Laureate sings.

THE awakening of public interest in the subject of leprosy should be of good service in promoting its renewed study by skilled scientific observers; although there is already available a vast amount of experience of the disease. Its insidious and progressive character, the frightful deformities that characterise the tubercular form, and the mutilations of the anæsthetic variety, are features which tend to impress the imagination, and to awaken the greatest sympathy for

the unfortunate victims. Nor have opportunities been hitherto lacking for the observation of the disease in this country, although from some statements it has been implied that we are only now receiving cases in our hospitals. As a matter of fact, there is hardly a hospital in London that has not had within its walls cases of leprosy within the past decade—in-patients, it is true, who have contracted the disease in countries where it is indigenous. Nor, so far as we know, has there ever been an instance of the communication of the disease from one of these subjects to others in this country. It cannot, therefore, be contagious to any marked extent, and yet there is no reason to doubt that under certain conditions it may spread by contagion. To what extent, and under what conditions, are questions which it may be hoped the proposed Commission will determine.

Undoubtedly the most interesting discovery in connexion with leprosy has been that of the presence in the leprous nodules, discharges, glands, and secretions of the characteristic bacillus of HANSEN (1874), a discovery which has been amply confirmed. Indeed, as Dr. ABRAHAM'S recent demonstration at the Epidemiological Society amply proved, the study of the disease at the present time is being largely concentrated upon the relation of this micro-organism to leprosy. The morbid anatomy of leprosy was long since thoroughly worked out by VIRCHOW and others, so that its analogies with such diseases as syphilis and tuberculosis were early established. Hence the idea that it owes its existence to the presence of a specific virus did not come upon the medical world as a surprise, and the further step towards the bacteriological standpoint was not more difficult of acceptance than has been the case with tubercle, which it so much resembles. For leprosy is no more a disease of the skin than tuberculosis is a disease of the lungs. In each case there is ample proof that the virus enters the blood, and that, like all forms of infective disease, it shows a special affinity for certain tissues. So far as regards the bacillus lepræ, it is noteworthy that there have been few (those of HANSEN and NEISSER excepted) really successful attempts to cultivate it in media outside the body or to inoculate animals with it. The lately issued Report of the Trinidad Leper Asylum for 1888 contains an account by the able medical superintendent, Dr. BEAVEN RAKE, of experiments which he made with the above object. His conclusions are worth recording. He says: "1. At a tropical temperature, and on ordinary nutrient media, I have failed to grow the bacillus lepræ. 2. In all animals yet examined, I have failed to find any local growth or general dissemination of the bacillus after inoculation, whether beneath the skin, in the abdominal cavity, or in the anterior chamber. Feeding with leprous tissues has also given negative results. 3. I have found no growth of the bacillus lepræ when placed in putrid fluids or buried in the earth."

In the present state of knowledge upon bacteriological matters it would be vain to build too largely on the supposed significance of this characteristic bacillus. That it has important relations to the disease there can be little question, and analogy suggests that it is the pathogenic agent. But the subject of leprosy requires to be studied anew in its broader aspects as well as investigated by the bacteriologist. Above all, the precise conditions of its alleged contagiousness require to be accurately determined, and then the next step will be to devise measures to limit its spread, as well as to render every possible means of relief to the leprous. Science and humanity will join hands in this task, which will, we trust, be accomplished to the credit of all. The medical profession, no less than the general public, will therefore be deeply interested in the progress of the movement which was so admirably initiated by H.R.H. the Prince of WALES in his speech on Monday last.

We regret to understand that there has been some mismanagement in connexion with the formation of the committee to carry out the proposed memorial to Father DAMIEN. Sir ANDREW CLARK has formally withdrawn his name, and stated that he has never given any authority for its use; his reason for withholding it being that, as the Royal College of Physicians has appointed a committee on the subject of leprosy which is at present deliberating and in communication with the Government, he as President of the College ought not to accept a position upon another committee which will be considering the same question from a wholly independent point of view. It is a great pity that the promoters of the memorial should have printed or circulated the names of persons whom they proposed to place upon the committee without previously ascertaining whether they were able or willing to join.

A REPORT which has been submitted to the Local Government Board by Dr. PARSONS[1] again raises the question as to the means by which scarlatina and throat diseases may be produced as the result of the consumption of particular milk-supplies. Early in February last, scarlatina and diphtheritic sore-throat appeared at Upton, which forms a suburb of Macclesfield, and also in that part of the borough itself which immediately abuts on the township of Upton, the two areas having but little in common as to their ordinary sanitary conditions, except that they both have the town water. In Macclesfield itself, after an entire absence of scarlatina from Jan. 12th till towards the close of the month, thirty-two cases were suddenly reported in the week ending Feb. 2nd, thirteen more cases being distributed over the remainder of the month. And in Upton, whereas no scarlatina is known to have existed there before January 24th, ten cases in seven different households occurred between that date and February 1st. And not only so, but the definite scarlatina was in both places accompanied by a numerous series of attacks from sore-throat having a diphtheritic tendency. It was locally noticed that nearly all the attacks occurred amongst the consumers of a particular milk-supply, and this having been brought under the notice of the milk vendor, he stopped the sale of his milk on January 31st, although nothing to account for the mischief had been detected on his premises. After that date the disease suddenly abated, and subsequent attacks could largely be accounted for by infection contracted from antecedent cases. In Upton itself there were forty-three attacks of one or other form of disease amongst the inmates of twenty-two households taking the special milk-supply, 37·5 per cent. being attacked; whereas there were only six such attacks in

[1] Eyre and Spottiswoode, East Harding-street, E.C.; Adam and Charles Black, Edinburgh; Hodge Figgis, and Co., Dublin. Price 6d.

116 houses not taking that supply, or at the rate of 5·2 per cent. And it is noteworthy that households taking large supplies of the suspected milk suffered more than those purchasing small quantities only. In Macclesfield itself the only record as to throat disease was limited to scarlatina, and out of the thirty-two attacks heard of in the week ending February 2nd no less than twenty-eight occurred amongst consumers of this one milk service, although there are sixty registered milk-sellers in the borough. And, taking the consumers of the suspected service as a whole, it transpired that where they were arranged in four classes according to the amount of milk consumed, the attacks amounted to 50 per cent. of those using one pint and upwards per head, to 34 per cent. of those consuming over three-quarters of a pint but under a pint per head, to 28 per cent. of those using between one-third and two-thirds of a pint, and to 12 per cent. of those who only used under one-third of a pint per head. The severity of the illness, as well as liability to attack, also appeared to depend upon the amount of milk which the patient was in the habit of consuming.

Referring to the different symptoms which were met with, and which led to the various attacks being styled scarlet fever, diphtheria, diphtheritic sore-throat, and simple sore-throat, Dr. PARSONS states that he is convinced that all were essentially of the same nature and due to the same cause, the differences between them depending on the age and constitution of the patient and on the amount of the poison taken; and he enters into certain clinical details in support of this contention. It would, indeed, appear that the absence of definite scarlatina symptoms was most commonly due to the fact that many patients were adults in whom previous scarlatina prevented the development of typical signs of that disease.

Coming next to the question as to how the milk could have become infected, an account is given of the circumstances of the dairy farm, of the family residing there, and of the routine of the milk business as carried on. The premises were scrupulously clean, although they exhibited certain sanitary defects; and the water-supply was, until after the date of the outbreak, derived from a well which was ascertained on chemical analysis to have been contaminated. One inmate, it is true, had suffered from a very suspicious throat affection; but, even assuming it to have been scarlatina, the date of attack shows it to have been an incident of the outbreak, and not its cause. All other persons about the dairy farm had been perfectly well. It must also be noted that there had been some scarlatina in December and January in the village of Prestbury, two miles from Upton, and that two children, not using the suspected milk, but attending Prestbury School, sickened of scarlatina about a quarter of a mile from the Upton dairy farm on January 24th and 30th respectively, but no connexion between any such cases and the farm could be made out. In discussing the details of the milk business itself, many suggestions as to possible infection of the milk are considered, such as the dipping into the milk-can of vessels from infected houses, and the possibility of danger during straining of the milk at the farm with cloths that might have been infected, but nothing pointed to any such source of infection.

The health of the cows came next under consideration. There were fourteen milch cows, and several medical men had examined them on Jan. 31st without detecting anything wrong. The Chief Veterinary Inspector for Cheshire also examined them on Feb. 7th, and he declares that the cattle he examined on the farms "and the milk as drawn from the udder were free from all disease capable of causing scarlatina and diphtheria in the human subject"; and, to clinch this fact, he adds that in an experience of thirty years he had "never seen or heard of cattle being attacked with infectious scarlatina, or with any other disease capable of communicating scarlatina to man." In short, the whole subject, to which so much scientific inquiry has been devoted, and which has raised so many doubts in the minds of skilled and thoughtful experts for the last few years, is settled straight off by a denial of the main point under consideration, and this mainly as the result of a day's inspection of a dairy farm. On Feb. 11th Major LANDON of the Veterinary Department of the Privy Council, also inspected the cows, and he was then unable to detect any sign of illness in them. But, tracing the doings of the dairy farm as regards the cows, it was ascertained by Dr. PARSONS that the milk of a newly calved cow was first distributed with the general milk-supply on Jan. 23rd, "a date which accords sufficiently well with the first outbreak of fever," and although this cow had no scabs or sores on the udder and teats, it exhibited certain bare patches on the rump and either side; a slimy, vaginal discharge was also observed. Thus far no definite cause of the scarlatina had been discovered; but a former experience had been repeated—namely, an outbreak of scarlatina had occurred amongst the consumers of a certain milk-supply, without its being traced to any ordinary cause, and at the farm from which the milk was derived a newly calved cow had recently been received.

On March 23rd Dr. PARSONS again went to Macclesfield, because the resumption of the use of the milk in question had been followed by fresh occurrences of scarlatina and of diphtheritic sore-throat. The dairyman, in view of this, left off adding the milk of the newly-calved cow to his general stock; and it also transpired that early in March some pimples or vesicles were discovered on one of the teats of this cow, and by the time her milk was rejected scabs had formed on these. The cow subsequently lost flesh, and the milk from this teat had to be drawn off with a quill.

The circumstances detailed at considerable length by Dr. PARSONS doubtless do not justify any definite conclusion as to the origin of this milk scarlatina; and he has acted wisely in stating all the facts without making any assertions as to the cause of the disease. The story, as told, will form one of a series which may, after further investigation, tend to clear up the doubts which still surround this subject of milk scarlatina. It is a careful record of facts that will be helpful in the pursuit of the necessary scientific investigation.

As the complete list of candidates for election into the Council of the College is now before the Fellows and Members, the time is opportune for considering what are the demands made upon the Council by the College proper, and what are the respective merits of candidates who aim

at securing seats on the Council. It is obvious to any impartial observer that of late a marked and reasonable agitation has prospered on the part of Fellows and Members, with the object of curtailing the autocratic power of the Council, and of augmenting the duties and privileges of the Fellows and Members, representing as they do the commonalty. There has also arisen a well-founded and natural determination that the right of public meeting in their own College shall be established, not only for the discussion of collegiate affairs of high and general importance, but also that the Fellows and Members assembled shall have an effective vote for or against the action of the Council. There has, moreover, been exhibited on the side of the Fellows and Members a prolonged and laudable attempt to do away with some, at any rate, of the anomalies existing in the government of the College. These assaults have been made on the Council not in any defiant spirit, but temperately and in a legal manner; the assailants profess themselves to be inspired equally with the assailed with the love of their College; they ground their opposition to the existing *régime* on the interests of medical polity and education, and are actuated with the desire of adding stability to the College. Up to the present, the majority of the Council have treated these demands and aspirations on the part of the commonalty with continued opposition and implied dissent.

If we could view this struggle for the legitimate exercise of power on the part of the many instead of the few as a transient fancy, opinion might be divided, and time asked for on the plea of prudence and expediency; but here we are dealing with a notoriously lengthened embroilment, and with real desires and claims, whose impress may be recognised in every-day life and in our best form of government. This broad question of self-government on the requisition of any educated community is not to be met by an excitation of petty jealousy between Fellows and Members; they are all members of one body; they have common aims and reciprocal interests.

Let us now inspect the ranks of the candidates for seats on the Council, and endeavour fairly to estimate their respective claims under the present circumstances. There are eight names, six of which are of London and two of provincial Fellows:—Mr. JOHN WHITAKER HULKE and Mr. CHRISTOPHER HEATH (retiring in rotation), Mr. WALTER RIVINGTON, Mr. GEORGE COWELL, Mr. HENRY GREENWAY HOWSE, Mr. CHARLES STEELE (Bristol), Mr. ROBERT LAWSON TAIT (Birmingham), and Mr. JOHN TWEEDY.

In order that the real issue may be, yet again, clearly brought before the Fellows, we adduce the following facts.

On March 24th, 1884, at a meeting of the Fellows and Members, the following resolutions, proposed by Mr. PAUL SWAIN, were passed:—

1. That, in the opinion of this meeting, it will materially conduce to the future welfare of the College that the Fellows and Members be invested with a larger share in its management. 2. That it is desirable that no alteration in the constitution or relations of the College shall be effected without the consent of the Fellows and Members convened to discuss such alteration. 3. That there should be an annual meeting of the Fellows and Members, at which the annual report of the Council should be presented, received, and (if approved) adopted. 4. That, in the opinion of this meeting, the President for the ensuing year should be elected by the majority of the Fellows present at such annual meeting.

These resolutions were carried by overwhelming majorities in the general meeting, but the Council refused to adopt them, consequently the Association of Fellows was instituted to promote the carrying out of the wished-for reforms. This Association has yet further recommended that not more than one-half of the Court of Examiners should also be members of Council. Since then the question of the enfranchisement of Members of the College has arisen; a large section of the Fellows have admitted the justice of the aspirations of the Members; and the Association of Members of the College has worked generally in agreement with that of the Fellows. The two retiring councillors, who are both also examiners, have opposed the chief reforms for which the Fellows and Members contend. Notably we may instance, in Mr. HEATH'S case, an attempt to expunge a minority report favouring certain reforms from the minutes of the College (*vide* THE LANCET, Feb. 25th, 1888, page 390), and in Mr. HULKE'S case his strenuous opposition to the suggested alteration in the mode of election of President (*vide* THE LANCET, May 10th, 1884, page 871). These gentlemen, retiring in rotation, represent the ideas of the past, and are, in the main, embodiments of the old order of things; they are identified as opponents of the reforms sought, and cannot be accepted as *personæ gratæ* by the reforming section.

Sir JAMES PAGET has retired (after twenty-four years of duty on the Council), and we trust that he may long enjoy his well-earned rest from the cares of office. Of the eight candidates, seven have issued addresses, either by post or through the medium of the medical press. Practically, we shall not be far from correct if we state that five out of the eight are more or less attached to the existing order of things; and three only are real, though temperate, reformers—viz., Messrs. WALTER RIVINGTON, LAWSON TAIT, and JOHN TWEEDY. We give each of the seven candidates who have issued manifestoes the credit of advancing his opinions in sincerity; but can the present *status quo* be maintained or the accentuated commotion be lessened by introducing into the Council men who can pour no oil on the troubled sea? Is it desirable, in the true interests of the College, that councillor after councillor shall be admitted who is unmindful of the claims of earnest reformers both amongst the Fellows and the Members? In our opinion (whatever may be the ultimate issue of this election), we must answer these questions in the negative, and turn with hopeful confidence to those more progressive aspirants to collegiate office—viz., Messrs. WALTER RIVINGTON, LAWSON TAIT, and JOHN TWEEDY.

Mr. TWEEDY'S position as a surgeon, his intimate acquaintance with the College (both in the past and present), and his profound sympathy with the advanced section of Fellows and Members in their desire to promote College interests, are, and have been, well known to most of us; his reluctance to accept nomination as a candidate has only been overcome by the mandate of stern duty. In him we recognise an element of strength to the College, and a type of the man wanted to harmonise the past history with the present requirements in the College Council. We trust that his name

may head the poll. Mr. LAWSON TAIT'S reputation as a surgeon, his enthusiasm on the subject of reform, and his determination are qualities of no small value in quickening the latent energies of any corporation; we should view his election as an advantage to the College, and watch his progress in the Council with lively interest. The provincial Fellows can well look after his candidature. Mr. WALTER RIVINGTON is a popular candidate amongst the members of our profession; he has done good work in the cause of reform, is an excellent speaker, and capable of carrying into effect his convictions. All three of these candidates enjoy the full confidence of the Association of Fellows and its sister Association of the Members of the College.

Let occasion be taken *now* to urge upon the present electorate, the Fellows, either to attend personally at the College on July 4th, or to apply for their voting-papers from the Secretary. The last day of application for voting-papers is the 24th of June. Let each Fellow, in consultation with his compeers, and by self-examination, make up his mind on this question of rational progress in College discipline; let him be assured that no revolutionary or crude programme is contemplated; it is to promote steady progress and to admit representatives of the Members of the house into the house; then, having arrived at a conclusion, let him record his vote, without fear and without favour.

Annotations.

"Ne quid nimis."

OPENING OF THE NEW MASSAGE BATHS AT BATH.

IN THE LANCET of Sept. 15th, 1888, we directed the attention of our readers to the new thermal system then in process of construction at Bath. An entirely new set of massage appliances, together with all that is new in thermal therapeutics, which has stood the test of experience elsewhere, in this country, and on the Continent, have been embraced in this redevelopment of the baths at Bath, which have been constructed at the cost of the municipality under the direction of the local medical men. The annual exodus of English invalids to the continental spas and thermal institutions has roused the energy of the local authorities of our own inland health resorts. The extension of "local self-government" has given power to the legally constituted municipal authority to find the ways and means to carry their good intentions to a practical result. At a cost of £25,000 the municipality of Bath have effected such improvements in their thermal system as to bring it into fair rivalry with the best continental spas. It is opportune that at the head of the municipality for the present year is a gentleman of our own profession—a position Mr. Freeman could only have occupied as some recognition from his fellow-citizens of the great services he has rendered the city of Bath, his profession, and the public in bringing to their present excellence the massage baths of Bath. These were formally opened on Thursday, the 13th, by the Duchess of Albany. The Princess Louise and the Marquis of Lorne were to have performed this function, but the Princess was prevented by indisposition, and her Royal Highness's place was supplied by the Duchess of Albany. Considerable disappointment was at first felt; but the young widowed Duchess, by her urbanity and unaffected manner, soon satisfied all requirements, and it is not too much to say gained the affectionate interest of all present. The whole function was discharged both by the Duchess of Albany and the Mayor with admirable tact. Some 300 medical men, consisting of consulting physicians and surgeons from London, and a large body of general practitioners, assembled with the treble object of (1) participating in the ceremony, (2) satisfying themselves by general inspection of the value of the improved system, and (3) of paying a mark of respect to their professional brother the Mayor. The baths and dressing-rooms were duly inspected, and much interest was displayed in the details and appliances for the thermal treatment of arthritic, uterine, and throat diseases by the natural waters of Bath, which spring from the earth naturally heated and ready for use. The architect has utilised a portion of the site of the old Roman baths, where this could be done with due regard to the archæological interest of the ancient remains. There are Aix massage bath-rooms lined with ancient patterns of Minton's tiles, in keeping with the history of the place. A variety of Aix appliances are fitted in these rooms. There are deep reclining baths fitted with douche and spray. Lifts are constructed to raise and lower the crippled. There is a reclining massage bath, suited to the paralytic or helpless invalid. There are vapour baths for the rheumatic and gouty, by which vapours can be driven with regulated force on to the skin for ready absorption. There are sitz baths for the treatment of maladies peculiar to women. Indeed, every mechanical appliance of proved value in the thermal treatment of disease can now be found at Bath. Mr. Freeman, the Mayor, and the whole municipality may be congratulated on the result of their labours—at once valuable to their city and the public at large,—the invalid being now relieved of the necessity of a journey to the Continent for efficient massage and thermal treatment of disease.

QUARANTINE AT SOUTHAMPTON.

THE imposition of a seven days' quarantine on the R.M.S. *Neva*, with her crew and passengers at Southampton, has led more than one to inquire whether quarantine is still in force in the waters of Great Britain. The vessel in question entered the port of Southampton on June 13th, two deaths having occurred on board from yellow fever during the voyage from South America, and a third having followed almost immediately after arrival. The facts seem to have been communicated to head-quarters, and an order for quarantine was at once issued. Such an order, as is doubtless known, is never issued by the State Department for Public Health—namely, the Local Government Board,—but is given under one of the ancient powers possessed by the Privy Council Office; and the circumstances of the yellow fever occurrence were admirably adapted to its exercise on this occasion. The last time yellow fever reached our shores was in September, 1865, when the disease had little or no consideration for our quarantine authority and their one quarantine station; indeed, it chose to reach Swansea, and since the Privy Council only maintain a single quarantine station at the Motherbank, off the Isle of Wight, the only quarantine that could then be put in practice was to ask a few questions and to take certain action as to the vessel after the crew had already actually dispersed. But on this occasion the *Neva* ran straight for a port close to the Motherbank, and hence the provisions of a statute the existence of which had been wellnigh forgotten by the public were at once put into operation, and both the crew and passengers were ordered to the two hulks lying off Ryde. What the precise object is of detaining a large body of healthy persons in this way will be by no means clear to the general public. Cholera is a true source of danger to this country, and yet in the case of cholera-infected vessels the healthy are at once eliminated from the sick and are set free, the old

practice of retaining sick and healthy together or in near contact being no longer resorted to. Yellow fever is only in a trivial degree a source of danger under the circumstances of this climate, and yet for the supposed purposes of its prevention two old vessels are maintained by the Privy Council at one spot only of the immense area extending all round the shores of England, Scotland, and Ireland. The *Neva*, unlike the *Hecla* in 1865, happened to run straight into the arms of the Privy Council, and hence England has been able to show that, notwithstanding all her pretensions at international gatherings, she is still a quarantining country. The *Neva*, we learn, has now been released.

INDICATIONS FOR IRIDECTOMY AND SCLEROTOMY IN GLAUCOMA.

DR. LOSHECHNIKOFF, writing in an ophthalmological review, published at Kieff, gives a *resumé* of 284 sclerotomies performed by him while attached to the ophthalmic clinic in Moscow. The operation employed was Wecker and Mauthner's double sclerotomy. There were eight cases of acute glaucoma, sixty-eight of chronic glaucoma from inflammation, ninety-three of absolute glaucoma, seventy-one of incipient, and eleven of simple glaucoma. To each series is added a table of effects on tension and sight. The effect is called "excellent" when T (tension) becomes normal, or less than normal, and central sight increases; "good" when T decreases and V (vision) remains the same; "medium" in cases of *status quo ante*, or when V is somewhat worse, but T decreased, or when there is a little improvement of V with permanent T; "bad" when V is worse and T permanent. In Table III., which deals with absolute and degenerative glaucoma, the author often says: "V improves," "V remains unaltered," though we are accustomed to use the expression "absolute" only in complete blindness from glaucoma. The author, however, claims for this series the best results, no less than 82 per cent. The following are some of his conclusions:—Iridectomy is indicated in chronic and subacute glaucoma. In absolute glaucoma, with symptoms of degeneration, sclerot my is indicated. In acute glaucoma sclerotomy is a preliminary operation, to be followed generally by iridectomy. Sclerotomy is for the sake of appearance preferable to iridectomy, and holds out better prospects for the improvement of sight. It is consequently indicated in incipient glaucoma. In simple glaucoma sclerotomy is preferable. In all cases of imminent prolapse of the vitreous, and especially in congenital hydrophthalmus, sclerotomy is indicated. In secondary glaucoma iridectomy is always preferable. It is absolutely necessary to use eserine before sclerotomy.

THE SHEFFIELD CORPORATION ON THE LATE SMALL-POX EPIDEMIC.

THE Sheffield Corporation, in acknowledging Dr. Barry's report on the late epidemic of small-pox, say they cannot speak too highly of that document, regarding it as they do as one of the most valuable contributions to the knowledge of small-pox ever laid before the public. This tribute to the merit of the report is one that is generally felt to be well deserved, and it comes with much appropriateness from the borough of Sheffield. On some other points the Corporation take an untenable attitude. Thus, dealing with the injury which the Winter-street Hospital produced by the diffusion of small-pox in its vicinity, the Corporation tell the Local Government Board that since the site and plans were submitted to them for their approval they are "equally responsible with the Corporation" for the resulting mischief. The plans, it appears, were approved in 1878. It was only in 1881 that the Local Government Board had any suspicion that small-pox hospitals spread disease around them, and when, as the result of Mr. Power's exhaustive inquiry, the suspicion was seen to be based on fact, a Royal Commission was appointed, and that body authoritatively declared that on the evidence before them it was clear that the hospitals under consideration had in some way or other led to the diffusion of small-pox around them. This result was known throughout the country; the Local Government Board did all in their power to spread the newly acquired knowledge, and yet in the face of all this the Sheffield Corporation decided that they would aggregate small-pox in the centre of a dense borough. And having now found out that the results of their action has been precisely that against which they, in common with all sanitary authorities, were warned by official reports, by the report of a Royal Commission, and by almost universal medical consent, they now turn round and try to affix blame to the very body which did all in its power to make public a warning against such action as Sheffield chose to pursue. The Local Government Board is, we presume, quite capable of defending itself, but that does not justify the attitude so unwisely taken up by the Sheffield Corporation.

WORCESTER COUNTY COUNCIL.

THE Sanitary Committee of this County Council have, with laudable enterprise, drawn up an elaborate report to be presented at the next meeting of the Council on June 1st. Taking the annual report of the Registrar-General as the standard, they compare the number of deaths in given registration counties, and point out that in various diseases the death-rate is higher in the county than it should be. Thus, in the years 1877–86, taking scarlet fever as an example, the deaths per million were in London 476, Herefordshire 295, Shropshire 391, Worcestershire 603. In order to show the improved condition arising from sanitation, the case of the Stratford-on-Avon combined sanitary district is taken. When, in 1875, the authority began their sanitary work, the death-rate from zymotic disease in the district was 2·1 per thousand. This rate has since steadily decreased, and it is now 0·5 per thousand. The committee think that, in the exercise of the powers contained in Section 17 of the Local Government Act, a legally qualified medical officer of health for the county should be appointed, who should not hold any other appointment or engage in private practice. After formulating the further details of such an appointment, they recommend the salary to begin at £800 a year, with such allowance for travelling expenses as may be from time to time sanctioned by the Council. The report is replete with useful information, and augurs well for the spirit and knowledge of its authors. To the profession it commends itself as a right and proper advance in county government.

AN OBSTETRIC MALPRAXIS SUIT IN IRELAND.

AN unhappy action for malpraxis has taken place at the Quarter Sessions at Longford. The wife of a cotter farmer, Mrs. Reilly, was attended by Mr. Archibald Nicolls and a nurse. After removal of the placenta there seems to have been inversion of the uterus, which was reduced. On each occasion of subsequent visits the doctor made a vaginal examination, and found each time the os uteri *in situ* and no inversion. On the other hand, more or less hæmorrhage continued, and after three weeks another medical attendant was called in, who swore that he found the uterus inverted, and the woman very anæmic and weak. He thought her too weak to think of reducing the inversion, and left her for nine days, when he called in a third practitioner, who confirmed the diagnosis, but made no effort to remedy the inversion for six weeks, when they determined to operate, but did

not do so for another fortnight, when they succeeded in returning the uterus, and the hæmorrhage ceased. Mr. Nicolls' defence was that when he ceased attendance there was no inversion, and that his strict orders for the woman to remain quiet had been violated—that she had got up and exerted herself with laborious house work. Several witnesses for the defence were examined, including Dr. Macan, Master of the Rotunda, who testified that it was quite possible for the inversion to have taken place from exertion after Mr. Nicolls' attendance had ceased. The judge dismissed the suit. We are glad to learn that a preliminary meeting was held at Longford on the 8th inst. to take steps to form a defence fund. Mr. Wilson of Edgeworthstown was invited to take the chair. Mr. Mayne of Longford was appointed secretary and treasurer. It is much to be regretted that the gentlemen who succeeded Mr. Nicolls in the attendance did not contrive to have his co-operation. The case is happily one of great rarity and difficulty, and in such circumstances the co-operation of all concerned is a great advantage to the patient and creditable to the profession. It is easy to criticise in all such cases. But prompt and hearty co-operation is the supreme duty. We heartily congratulate Mr. Nicolls on the result of the trial, and hope the subscriptions will be such as to fully save him from loss.

THE ITALIAN PARLIAMENT ON MALARIA.

IN the Chamber of Deputies at Rome, an order of the day, introduced by Signor Garelli, urging the Legislature to proceed with the thorough and speedy reclamation of the Agro Romano, brought on a "full-dress debate" on the causes and prevention of the fever which still hovers round the Eternal City. Among the speakers were Dr. Tommasi-Crudeli (a leading pathologist) and Dr. Guido Baccelli (a leading clinician), of Italy; Prince Odescalchi, a liberal and enlightened landowner of the Campagna; and Signors Baccarini and Araldi, both in the first rank of engineering science. The result was highly favourable to Signor Garelli's motion, and the arguments, dealing more with the detail than with the principle of the undertaking, were full of interest for the State hygienist of all countries. Dr. Tommasi-Crudeli contended for care and circumspection in carrying out the drainage works. He feared they had already been too superficial. The subterranean waters were deeper and more extensive than the hydraulic apparatus had yet been able to cope with, and, thanks to the massive stone embankments of the Tiber, the outlet for those residual waters had been blocked up so as to cause regurgitation and the permanent flooding of the subsoil. Prince Odescalchi deprecated the notion that the reclamation of the Campagna could be effected in only a few years and with the outlay of a few millions. So monumental a work required critical re-examination from stage to stage, to make sure that its operations were always well advised, and to avoid the necessity for undoing what had already been laboriously and expensively done. He even counselled suspension of the undertaking till science had clearly demonstrated that it was soundly inspired. This suggestion, however, found no favour with the ex-Minister of Public Works, the engineer Baccarini, who strenuously urged the completion of work so well begun. In an interesting historical retrospect he showed how the malaria of the Roman Campagna had been a factor in the greatness of the "Mistress of the World"; how the febrile cordon had kept Brennus and Hannibal at bay; how at no time was the Campagna, even when studded with the villas of the patricians, frequented in the midsummer and early autumn months; how a cultivation compatible with the geological nature of the soil is gradually serving to solve the difficulty of making it habitable; and how the desiccation of the marshes of Ostia and the Maccarese, followed up by the system of *colmate*—that is, of filling-in and covering over with good soil the dried-up spaces—will eventually prepare the ground for that cultivation which experience has shown to be the one true preventive of malaria. Signor Baccarini was sustained by Dr. Baccelli, who, while modifying the view of his predecessor as to the persistence of the malaria around Rome, banished as it had been under the happy rule of the Antonines, reinforced the argument for cultivation, preceded by draining and by the *colmate* system, which, indeed, even in the absence of drainage, is itself an effective treatment of malarious soil. The geological character of the Agro can thus be transformed—a task requiring outlay of money and tenacity of purpose, but not beyond the resources of Roma Rediviva. The work will crown the revolution which has made Italy one and independent—a noble justification of the steps that have rendered Rome the capital. Signor Araldi's speech concluded the debate from the technical point of view, and then the Premier, Signor Crispi, admitting the value of the discussion and the instructive expositions with which it had been fraught, accepted Signor Garelli's invitation without further comment, and the estimates for the reclamation works were approved.

EFFECTS OF A DIMINUTION OF LIQUIDS.

A PLAN of treating certain forms of chronic disease by diminishing the liquor drunk having been recently proposed and practised by Professor Oertel, Dr. Karchargin resolved to make some observations on the effect produced on healthy persons by diminishing the amount of liquid ingested. His observations were conducted on six healthy students of the Military Academy, St. Petersburg, and during three periods of five days each. The ordinary amount of liquid was taken during the first and third of these, and a smaller quantity (usually about 40 per cent. of the normal quantity) during the second period. The general conclusions arrived at were that diminution of liquids causes a distinct loss of weight, a feeling of malaise, a decrease in the quantity of urine excreted, but an increase in its specific gravity, a slight increase in the nitrogenous assimilation, and a slight decrease both in the character and amount of the nitrogenous metamorphosis. During the third period it was found that the weight increased and the feeling of malaise disappeared; the nitrogenous metamorphosis, too, returned to its normal amount, but remained of a lower grade than it had been before the quantity of liquid was reduced.

FRUIT AND ITS CULTURE.

FOR many years an increasing demand for fruit as an article of diet has indicated a satisfactory soundness of public taste. The fact is the more noteworthy that it is probably due not merely to a sense of the refreshing effect of such food, but also of its nutrient value. Into this matter we will not now enter at length. We feel sure, however, that our readers will agree with us that few substances are more likely to aid the digestion of a moderate meal, while adding certain useful constituents, than a little bland or subacid fruit. Some allowance must, of course, be made for constitutional disability—such, for example, as is often associated with a gouty tendency or with intestinal irritability. So likewise must it ever be remembered that safety in the use of any raw fruit corresponds exactly with its ripeness. With such needful qualifications, however, a liberal allowance of this form of nourishment will be found by most persons as wholesome as palatable. It is, therefore, a matter for congratulation that in proportion to the increasing demand there has been evident on the part of fruit growers and importers a disposition to consider earnestly the question of ways and means in relation to its supply. The prospects of cultivators at home have

of late received especial attention, happily so far with encouraging results. In spite of certain guarded and somewhat ominous utterances on the subject, there seems to be a pretty general agreement among producers that fruit farming can be made to pay, and to pay well, if reasonably favourable conditions be guaranteed. These include a readjustment of present railway rates, a modification of the extraordinary tithe dues, and a greater fixity in land tenure, or some compensation for necessary outlay in planting and rearing a slowly productive though valuable crop. Another necessity is the wider dissemination of knowledge as to the soil and exposure best adapted to the growth of different fruits and their varieties. Every project has to traverse opposing difficulties in order to succeed, and that now under discussion evidently affords no exception to this rule. There is happily no reason to regard any one of those enumerated above as insuperable. Where the arrangements of railway companies have been too costly, other modes of carriage have before now been successfully employed. It is hardly to be expected, however, that either the companies or any intelligent landowner will long persist in refusing to meet, as far as possible, the views of persons interested in what bids fair to become, with judicious encouragement, a flourishing national industry, and one, moreover, which is likely to hold its own in the face of foreign competition.

THE ARMY MEDICAL OFFICERS' DINNER.

THE annual dinner of the Army Medical Department was held at the Holborn Restaurant on the 11th inst. The chair was taken by the Director-General, Dr. W. A. Mackinnon, C.B., who has recently succeeded to the high post he now holds owing to the retirement of Sir Thomas Crawford. The Director-General was supported by Inspector-General Lawson; Surgeons-General Balfour, F.R.S., Sir Thomas Crawford, K.C.B., Gordon, C.B., Irvine, Madden, Mouat, V.C.; Brigade-Surgeons Anderson, Beattie, Clarke, Cogan, Gribbon, and many surgeons-major and surgeons, the company numbering upwards of a hundred. Amongst the visitors were Dr. Dick, Director-General R.N., Sir Charles McGrigor, Bart., Sir William MacCormac, Sir William Aitken, and Dr. Farquharson, M.P. The usual loyal toasts were given by the chairman, who spoke with commendable good sense and brevity. The toast of "Success to the Army Medical Department" was warmly received. The party dispersed after spending a very pleasant and sociable evening.

A ROYAL PHYSICIAN AND PHILANTHROPIST.

THE House of Bavaria can boast of few worthier scions than his Royal Highness the Duke Charles Theodore, who has just resumed his *villeggiatura* on the Tegern-See after a campaign as honourable as any recorded in the history of his ancestors. For eight weeks, together with his wife and his assistant physician, Dr. von Zenker, his Royal Highness, who has graduated as Doctor of Medicine, has been devoting his experience and skill in ophthalmic surgery to the poor of Meran who suffer from affections of the eye. That well-known health resort of the Austrian Tyrol is now year by year frequented by crowds of the humbler class of patients who are afflicted by disease of the visual organs, attracted thither by the cure or alleviation they gratuitously receive at the hands of his Royal Highness. Just before the Whitsuntide recess no fewer than 1061 of these had been under treatment, in which the chief share was borne by the "Duke-Doctor," as he is familiarly called, while the Duchess performed the part of nurse and general benefactress. In 195 cases he had recourse to operation, with unusually satisfactory results, among which may be noted the cure of sixty-eight persons suffering from cataract, to all of whom their eyesight was successfully restored. In these last his Royal Highness acknowledges the co-operation of his assistant, Dr. von Zenker, whose skill in ophthalmic disease had recommended him for the post. The mining and pastoral population around the Tegern-See welcomed their "Duke-Doctor" and his consort on their return among them with the most touching demonstrations of affection and esteem—demonstrations, however, not more cordial than those of the Tyrolese poor, whose gratitude they had earned by benefactions in the power of few to bestow.

THE LIVERPOOL INFECTIOUS HOSPITAL COMMITTEE.

FOR some years past the Liverpool Corporation have had a Hospital Committee, presided over by Mr. R. Hamilton, F.R.C.S., and under his chairmanship numerous efforts have been made to provide the city with proper accommodation for persons suffering from infectious diseases. In addition to the temporary small-pox hospital near the river, two fever hospitals have recently been provided for Corporation purposes. Some may not fully agree that the provision made under Mr. Hamilton's auspices has been the best from a theoretical point of view; but it received the sanction of the Local Government Board, who held a lengthened inquiry into it, and few can doubt that an excellent instalment of hospital provision has been made in two portions of Liverpool, and this in the face of difficulties which it has taken years to overcome. We now learn that, on the Council instructing the Hospital Committee to defer bringing up a report with regard to more permanent hospital provision until further directions are given to them, Mr. Hamilton has felt that this was a reflection on his persistent endeavours to mature the scheme of his committee, and that he has resigned; and it is also suggested in Liverpool that since more accommodation has not been wanted for some years, and since temporary accommodation could at any moment be procured, there is now no need for hurry. A more unfortunate conclusion of the committee's labours could hardly be imagined. It is notorious that Liverpool has constantly pauperised people by sending them into pauper infectious hospitals because the Corporation had made no adequate provision, and it remains equally notorious that the number of beds now available falls very far short of the current requirements of such a city. As to temporary accommodation, it must be known in Liverpool that sites cannot be obtained on the spur of the moment for the infectious sick, and that most people who have trusted to temporary provision have failed to stay the epidemic which they desired to control, and at times have not even had their hospital ready until the epidemic had completed its course. We sincerely trust that this question will be dealt with in Liverpool in a manner which its importance demands.

SUBCUTANEOUS LYMPHORRHAGIA.

DR. NEUFELD mentions in a Polish journal a few cases which have come under his notice, where, in consequence of some injury, extravasation of lymph from a lymphatic vessel has occurred. Six years ago a man was brought into the hospital who had been struck on the thigh with a large piece of coal. There was no discolouration of the skin, but there was marked fluctuation over a large portion of the anterior and lateral aspects of the thigh. Some years later another patient came into the hospital who had received a blow on the back; here also there was extensive fluctuation, involving the whole of the dorsal region. With regard to the first case, although Dr. Neufeld suspected from the first that the fluctuating fluid was lymph, he was unable to feel certain of it, and up to that time no descrip-

tion of lymphorrhagia had been published in any of the well-known text-books. As the tumour showed no signs of diminishing after a couple of months, he made an extensive incision into it, thus emptying the sac, after which the wound healed rapidly without fever. In the second patient the fluid disappeared spontaneously after the patient had been lying on his back for six weeks. A third case is mentioned in which no change took place for six weeks. Dr. Neufeld is disposed to agree with Gussenbauer as to the origin of this accident, and believes that the best treatment consists in laying the sac well open during the first few days.

DEATH OF DR. C. B. RADCLIFFE.

WE regret to have to announce the sudden death of Dr. Charles Bland Radcliffe. The deceased physician was feeling quite well and dined comfortably at his own table last Tuesday. He afterwards sat writing in the drawing-room until about nine o'clock, when he suddenly proceeded to his bedroom, and shortly afterwards summoned his wife. She found her husband sitting half undressed, and a small pool of blood on the floor. Deceased suffered from a rather large umbilical hernia, and the hæmorrhage had taken place from a varicose vein on the surface of the tumour. The loss of blood was at the outside probably not more than 8 to 10 oz.; but from the first Dr. Radcliffe's nervous and circulatory systems appeared to have received a shock which deprived him of all confidence and power of helping himself. Mr. Christopher Heath ligatured the bleeding vein, but circulation rapidly failed, and, although stimulants were swallowed without difficulty, the deceased never spoke, and in a few minutes ceased to breathe. Sir Risdon Bennett, who was also present, thinks there can be no doubt that for some time past Dr. Radcliffe's general vital power had been much impaired, with a feeble and, not improbably, fatty heart, as otherwise the case would not have proved fatal from the mere loss of blood.

INTRA-UTERINE COMPRESSION OF THE AORTA IN POST-PARTUM HÆMORRHAGE.

DR. HOYOS, a Cuban practitioner, writing in the *Revista de Ciencias Médicas*, mentions a case of most alarming post-partum hæmorrhage to which he was called by a midwife, who fortunately seems to have been a very intelligent person, and in which, finding the patient *in extremis* with the hæmorrhage still continuing, and having nothing in the way of appliances with him except a hypodermic syringe and some ergotine, he proceeded first to clear away the clots from the uterus. While his hand was in the cavity of the organ he was struck with the distinctness with which he was able to feel the pulsations of the abdominal aorta, and determined to try, as a temporary measure at all events, to stop the bleeding by means of pressure, a method which he knew had been recommended and practised by Dr. Sejournet and other obstetricians. In order to effect this, he simply turned his hand so that he could feel the pulsating vessel between the pulps of the fingers and the vertebral column. He then exerted firm pressure, and was immediately aware that the gush of blood, which up to that time had been welling up round his hand, had stopped. Keeping the right hand in the uterus, he contrived with some little difficulty to administer a hypodermic injection or two of ergotine with his left hand, as the midwife prepared everything for him. After a few minutes he withdrew his hand, he and the midwife keeping up the pressure externally. When the instruments for which he had sent a messenger arrived, he administered an intra-uterine injection of corrosive sublimate in a solution containing 10 per cent. of spirit. Brandy was also given, and more ergot, both in the form of ergotine and in powder. The patient soon revived, and though the hæmorrhage showed a disposition to return a few hours later, it was controlled by means of intra-uterine irrigation and hypodermic injections of ergotine. Dr. Hoyos remarks that while it is quite possible that aortic compression may not always be the best practice, still in such a case as this, where no uterine syringe was at hand and the patient was *in extremis*, its employment may probably be the means of saving life.

THE RESPIRATION CHAIR IN EMPHYSEMA AND ASTHMA.

IN a graduation thesis Dr. Carl Grunert of Halle discusses and describes the treatment of emphysema and asthma by means of the respiration chair. The chair is so constructed as to effect by means of levers and bands attached to it pressure and traction on the thorax similar to that exerted by the muscles in forced respiration. A cuirass makes backward and downward pressure on the thorax, while a broad band compresses the abdomen and so increases the intra-abdominal pressure; the abdominal viscera then force the diaphragm upwards, and the latter rises. The ultimate effect, according to the author, is to make a forced expiration possible, to considerably decrease the volume of the thorax, and to empty more completely the hitherto badly aerated alveoli, so that at the next inspiration more oxygen enters; any bronchitic mucus which may be occluding the alveolus is also expelled. This is followed, of course, very soon by diminution of the dyspnœa. The disturbance of the circulation of the blood in consequence of emphysema is recognised by the abnormal loudness of the second pulmonary sound. This was found to decrease in three patients after a treatment of from three to six weeks in the respiration chair, while the first mitral sound increased, showing that the cardiac muscle had become stronger. Emphysematous patients treated in the chair lost more or less completely their chronic bronchial catarrh; the attacks of coughing improved greatly, permitting sleep to be obtained without disturbance; the asthmatic symptoms, too, were frequently cured. A number of cases treated by this method in the chair are described, and the results obtained tend to show that in many instances the respiration chair may prove an advantageous method of treatment.

DIPHTHERITIC PARALYSIS.

THE general impression about the prognosis of diphtheritic paralysis used to be that it was not very unfavourable. But the labours of some of the members of the medical staff of the Great Ormond-street Hospital go to show otherwise. In children the affection is by no means one on which the physician can look with a satisfied gaze. The paralysis brings in its train a fatal possibility, chiefly from three directions: heart, lungs, and larynx—the organs whose innervation is largely by the vagus and phrenic nerves, the motor fibres of which are derived from nerve cells in the anterior horns of the spinal cord or their equivalents in the floor of the fourth ventricle. Dr. Harry Swift's pamphlet[1] will serve to extend the knowledge of the prognosis of diphtheritic palsy on the continent of Australia. The work is constructed in excellent form, and contains many observations made by the author, whilst one of the resident medical officers at the Great Ormond-street Hospital. The mode of disappearance of the knee-jerk, as described by Dr. Swift, differs from that observed by Dr. Angel Money, who made out an increased excitability of this phenomenon prior to its final extinction. Dr. Herringham also discovered a similar excessive irritability of the deep reflexes during the period of restoration of the knee-jerk. The long absence of the knee-jerk in cases of post-diphtheritic debility un-

[1] Adelaide: J. H. Sherring & Co. 1889.

attended by actual paralysis is a fact on which Bernhard first laid proper stress. The knee-jerk is one of the most delicate indicators of the state of the nervous system, and some small muscles come, perhaps, next to it in sensitiveness—e.g., the neuro-muscular apparatus of the ciliary muscle, the pupil, and the ocular muscles. Cases of complete ophthalmoplegia have been recorded as the outcome of diphtheria.

THE COLLEGE ELECTION.

THE following are candidates for the vacancies in the Council of the Royal College of Surgeons at the next election on July 4th. The retiring members of Council are Sir James Paget, F.R.S., Mr. J. W. Hulke, F.R.S., and Mr. Christopher Heath. Sir James Paget does not come forward again, but Messrs. Hulke (Member 1852, Fellow 1857) and Heath (Member 1856, Fellow 1860) offer themselves for re-election. Those who have not previously had seats on the Council are in order of seniority as Fellows: Mr. Walter Rivington, Member 1859, Fellow 1863; Mr. George Cowell, Member 1858, Fellow 1867; Mr. H. G. Howse, Member 1865, Fellow 1868; Mr. Charles Steele, Member 1860, Fellow 1869; Mr. R. Lawson Tait, Member 1870, Fellow 1871; Mr. John Tweedy, Member 1872, Fellow 1876. This is the first year that the Fellows have had the privilege of voting by proxy, and it is expected that the contest will be an exciting one.

AMERICAN MEDICAL ASSOCIATION.

THE programme of the fortieth annual meeting of the American Medical Association, which is to be held at Newport, R. I., on June 25th and following days, is published in the *Journal of the American Medical Association* of June 1st. The president of the year is Dr. W. W. Dawson of Cincinnati, who will deliver his address on the opening day. An address on Medicine will be given by Dr. Wm. Pepper of Philadelphia, one on Surgery by Dr. Phineas S. Conner of Cincinnati, and one on State Medicine by Dr. W. H. Welch of Baltimore. The list of subjects to be discussed is a large one, the various sections being:—(1) Practice of Medicine, Materia Medica, and Physiology; (2) Obstetrics and Diseases of Women; (3) Surgery and Anatomy; (4) State Medicine; (5) Ophthalmology; (6) Diseases of Children; (7) Dental and Oral Surgery; (8) Medical Jurisprudence; (9) Dermatology and Syphilography; (10) Laryngology and Otology.

THE TONSILS IN PHTHISIS.

DR. DMOKHOVSKI publishes in a Polish medical journal, the *Gazeta Lekarski*, some important observations on the condition of the tonsils and the follicular glands at the base of the tongue in phthisical subjects. Strassmann had previously made some observations on the tonsils, and had found them affected in thirteen cases out of twenty-one which he examined. Dr. Dmokhovski was able to show some affection of the tonsils in every one of the fifteen cases examined post mortem, the lymphatic glands at the base of the tongue being also affected in nine of these cases. The lungs were in every instance decidedly affected, and in five there was slight tuberculous ulceration of the larynx. The ages of the subjects varied from eighteen to fifty-six. Presumably the tonsils were infected from the mouth, the bacillary infection at first affecting the epithelial layers and subsequently the deeper tissues—viz., the lymphatic sinuses and the follicles themselves. The tuberculous character of these changes was made manifest either by the existence of large disseminated collections of Koch's bacilli, or by the concomitant signs of general inflammation of the connective tissue, or by the occurrence of fully developed tubercles. These showed themselves first of all in the connective tissue between the follicles along the lymphatic vessels leading to neighbouring cervical lymphatic glands. Ulcerations of the tonsils were observed in the crypts, but never on the free surface of the glands; sometimes cavities were found in the tonsils. In the living subject no marked affection could ever be detected by the naked eye in the tonsils. The absence of disposition to external ulceration is explained by the supposition that the deeper tissues form a far more suitable soil for the development of the tubercle bacilli than the superficial tissues—that is, the mucous membrane covering the surface of the gland.

SCURVY IN THE RUSSIAN ARMY.

DR. STATSEWICH, writing in the *Russian Military Medical Journal* on Scurvy in the Army, sums up his conclusions as follows. 1. Scurvy is a non-contagious septic disease. 2. Epidemic prevalence of scurvy in the Russian army in time of peace directly depends upon bad diet. 3. Sporadic scurvy in regiments and military hospitals occurs because many people are not used to exclusive and unpalatable diet. 4. The first and most important prophylactic measures against scurvy would be to discharge all the purveyors of victuals and to have abbatoirs in all garrison towns. 5. So-called superior flour should be excluded. 6. The following is a proper dietary for soldiers:—Twice a week, cabbage soup; twice, potato soup; once, turnip soup; once, pea soup; once, maccaroni.

THE INTERNATIONAL HYGIENIC CONGRESS.

A LARGELY ATTENDED meeting was held at the Parkes Museum on Tuesday of the delegates appointed by the various universities, colleges, and learned societies to organise the arrangements for the International Hygienic Congress of 1891, which will meet in London. Sir Spencer Wells, who had attended the meetings of previous congresses in continental capitals, took the chair, and Dr. W. H. Corfield and Mr. Shirley Murphy, the English members of the Permanent Committee of the International Congress, acted as honorary secretaries. Dr. Corfield explained the preliminary steps that had been taken to constitute a general committee, and the following gentlemen were elected members of an executive committee with power to add to their number:—Sir Douglas Galton, K.C.B., Professor Frankland, Professor Hayter Lewis, Dr. Thorne Thorne, Dr. Mapother, Dr. Mouat, Mr. E. Hart, Professor Corfield, and Mr. Shirley Murphy.

SYPHILIS COMPLICATED WITH SCURVY.

DR. TALYSIN, having under his care two cases of syphilis complicated with scurvy, and finding no mention in literature of the best treatment of the two diseases when occurring simultaneously, resolved, after a consultation with his colleagues, to treat the syphilis alone. The mercury given, though it soon produced a formidable degree of cachexia, was continued for about a month, by which time the syphilitic affection had entirely disappeared. Only then was the scurvy treated. It was cured in about six weeks by the administration of quinine and acids combined with strengthening food.

THE SANITARY WORKS IN NAPLES.

ON the 16th inst., in presence of the King and Queen of Italy and the Prince of Naples, the loveliest of Mediterranean cities began her long-deferred work of sanitary rehabilitation. The nature and extent of this we shall take another opportunity of indicating from official sources. In the meantime, we may congratulate the Neapolitan muni-

cipality on its efforts to redeem the character of the city from the reproach it has all too justly deserved—the reproach of concentrating in itself nearly every vice of which the sanitary reformer can take cognisance, whether as to water-supply, as to drainage, or as to dwelling-house accommodation.

FOREIGN UNIVERSITY INTELLIGENCE.

Göttingen.—Dr. Otto Wallach, Extraordinary Professor of Chemistry in Bonn, has been appointed to the vacant chair of Chemistry. Professor Wallach has recently been awarded the great Medal of the Leopold Caroline Academy.

Lille.—M. Meyer has been selected as *agrégé* in Physiology.

Lyons.—M. Vialleton has been selected as *agrégé* in Physiology.

Montpellier.—M. Headon has been selected as *agrégé* in Physiology.

Paris.—The competition for the rank of *agrégé* in Anatomy has terminated in the selection of M. Retterer, and that for *agrégé* in Physiology in the selection of M. Gley.

Tomsk.—Dr. Malieff, Extraordinary Professor of Anatomy, has been raised to the rank of Professor in Ordinary.

THE progress made by Germany in anthropological research will, it is anticipated, receive brilliant illustration at the Great Congress of Anthropologists to be held at Vienna from the 5th to the 10th of August. The Austrian Anthropological Association will then give hospitality to all its sisters throughout Germany and abroad, and the museum in connexion with the proceedings will be especially rich and varied. Excursions will form a very pleasant feature of the programme, beginning with one to Hallstadt, a place of exceptional interest to the anthropologist.

DURING the months of October, November, and part of December Dr. Savage will give a course of instruction in "Mental Physiology, especially in its relation to Mental Disorder," adapted to the requirements of candidates for the M.D., M.S.Lond. The instruction will consist of a formal lecture on Mondays at Guy's Hospital, and clinical demonstrations every Tuesday and Friday in the wards of Bethlem Hospital. Particulars can be obtained at the office of the Medical School, Guy's Hospital.

MR. S. PLOWMAN, F.R.C.S., Apothecary to, and tutor and joint lecturer in Materia Medica at, St. Thomas's Hospital, has accepted a unanimous invitation from the Council of the Pharmaceutical Society of Australasia to become the Director of their College of Pharmacy in Melbourne, and to be Demonstrator of Pharmacy to the University medical students.

THE *London Gazette* of the 14th inst. publishes a despatch from the British Representative at Manilla, declaring that port and neighbourhood to be infected with cholera.

DR. ROBERT BOXALL has been appointed Assistant Obstetric Physician to the Middlesex Hospital.

VOLUNTEER MEDICAL STAFF CORPS.—On the 8th inst., a detachment of No. 1 Company of this corps, under Surgeon Valentine Matthews, left London for Potter's Bar, and marched from thence to St. Albans. Here they erected a Ducker portable house, which proved a welcome shelter from the rain, and which they afterwards took to pieces and carried back with them to Potter's Bar, thus demonstrating their ability to rapidly construct a temporary building suitable for a hospital.

THE METROPOLITAN HOSPITAL SUNDAY FUND.

THE Committee of the Hospital Sunday Fund have issued a brief statement setting out shortly the history of the Fund and giving some statistics of hospital work during last year. The following extracts will be of interest to our readers.

"Hospital Sunday in London was established in the year 1873, during the Mayoralty of Sir Sydney H. Waterlow, Bart., now Vice-President of the Fund. The late Dr. James Wakley, Editor of THE LANCET, was perhaps the first person to press for Hospital Sunday in London by numerous paragraphs and articles in that paper during the years 1869–72. Lord Mayor Waterlow gave practical effect to the suggestions of the late Canon Miller, D.D., and others, and became the first President and Treasurer of the Fund in London. Sir Edmund Hay Currie and Richard B. Martin, Esq., have worked as Honorary Secretaries from the commencement, and they still hold office."

Then follows a list of London hospitals and kindred institutions, which have been in greater or less measure dependent on the Fund, together with particulars of the number of beds which they furnish and the number daily occupied. It appears that of the former—that is to say, of beds provided—there are 9695, of which, upon an average, 7115 were daily occupied during the past year. The dispensaries show a total number of out-patient attendances of 307,919. It will be observed that these figures agree very closely with those that we gave last week, though deduced from independent data; and thus strikingly confirm the general accuracy of the picture that we then drew of the work of the London hospitals.

The statement then passes on to a summary view of the financial history of the Fund as follows.

"In the past sixteen years over half a million of money has been collected by the Council and paid to institutions in the proportions recommended by the Committee of Distribution, the members of which are not allowed to hold any financial position with any participating charity.

"The following Table will show the growth of the Fund since its establishment in 1873:—

Years.	Contributing congregations.	Amounts received from congregations.	Amounts received from legacies and special donations.	Total receipts.
		£ s. d.	£ s. d.	£ s. d.
1873	1072	25,855 13 0	1844 15 1	27,700 8 1
1874	1217	28,431 7 6	1505 10 4	29,936 17 10
1875	1120	24,971 16 3	1424 5 9	26,396 2 0
1876	1089	25,703 7 2	1339 4 2	27,042 11 4
1877	1165	25,135 18 4	947 0 9	26,082 19 1
1878	1171	23,705 10 3	1199 9 3	24,904 19 6
1879	1176	25,380 4 4	1120 19 9	26,501 4 1
1880	1225	28,856 17 4	1567 1 6	30,423 18 10
1881	1268	30,218 7 10	1638 6 7	31,856 14 5
1882	1337	32,039 13 6	2106 8 11	34,146 2 5
1883	1414	31,954 7 2	1980 19 1	33,935 6 3
1884	1522	32,918 18 7	*6410 17 11	39,329 16 6
1885	1597	31,764 17 1	†2555 11 4	34,320 8 5
1886	1595	35,581 18 9	‡4817 8 10	40,399 7 7
1887	1633	36,476 17 6	‡4130 10 2	40,607 7 8
1888	1669	37,290 7 1	3080 2 5	40,379 9 6

* In 1884 £4500 was received from the Managers of the International Health Exhibition.

† In 1885 a special donation of £1000 and another donation of the same amount in 1886 were received from James Wakley, Esq., M.D.

‡ In 1887 a legacy of £1000 was paid by the executors of the late James Wakley, Esq., M.D.

"The largest Church or Congregational Collection in 1888 was £1164 10*s.* 9*d.*

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"In the year 1880 provision was made for supplying poor persons, properly recommended by the heads or representatives of their several congregations, with surgical appliances to the extent of 4 per cent. of the Fund. This provision has now been raised to 5 per cent., which gives

about £2250 to spend in monthly proportions. In 1888 no less than 2004 appliances were given to deserving poor people.

"There are unfortunately a large number of beds not only vacant but unfurnished for want of funds in our hospitals. "In round numbers £80,000 to £100,000 is wanted this year to relieve the debts of our hospitals and dispensaries."

We have also been furnished from the same source with a more detailed statement of hospital income and expenditure, of which the following is the summary:—

SUMMARY.

Hospitals and Dispensaries.	No. of beds.	No. of beds daily occupied.	In-patients.	Out-patients.	Total expenditure.	Income.			Total income.	Legacies (not included).
						Charitable.	Proprietary	Patients' payments.		
					£	£	£	£	£	£
Newington and South District	1461	948	13,123	128,430	81,567	31,355	37,670	9,031	78,056	4,670
City and East Central District..	663	413	6,597	139,564	47,312	28,260	8,531	4,175	40,966	10,682
Westminster District	866	702	8,228	131,359	69,889	39,999	11,292	7,572	58,863	12,933
St. Marylebone and West Central District	1225	937	11,866	122,945	81,452	52,725	11,998	9,134	73,857	18,661
Kensington and West District	1666	1340	14,339	200,490	131,350	76,838	22,702	8,539	108,079	150,427
Islington and North-West District	822	550	6,907	116,829	62,364	40,944	9,003	6,660	56,607	14,250
Stratford and East End District	1309	1036	13,256	198,810	88,747	65,812	26,108	478	92,398	19,761
Totals	8012	5926	74,316	1,038,427	562,681	335,933	127,304	45,589	508,826	231,384

It will be observed that this second statement does not cover quite the same ground as the former, the explanation being that a large number of convalescent hospitals and other institutions which serve the London poor are situated on the sea-coast or otherwise outside the London district. The financial statement shows that if legacies be left out of account there is a deficit upon the year of nearly £54,000; whereas if legacies be included a considerable surplus is shown. It should, however, be understood that neither of these methods of reading the figures is quite free from objection. We discussed this matter last year, and perhaps, therefore, it is not necessary now to do more than refer to it in a very few words. The fact is that the expenditure includes a certain amount of capital outlay which ought not to be credited against ephemeral income, and when allowance is made for this expenditure the two sides of the account are found to come nearly to a balance. On the other hand, it is equally obvious that incoming capital, such as legacies, cannot prudently be employed to defray ordinary working expenditure, and that any surplus brought out by such a manipulation of the accounts would be wholly illusory. It were much to be desired that the distinction between revenue and capital accounts were more clearly understood, or at least more rigorously observed by the accountants who prepare the statements of the various hospitals. But the best imaginable system of accounts would still fail to discover where the shoe pinches, for the real difficulty of the London hospitals is, not to make ends meet—that can be done by retrenching their operations,—but to keep their machinery in full work.

ERRATA.—Our attention has been drawn to two or three errors which have crept into our tabular statement of Hospital work published last week, and which we are glad to have the opportunity of correcting.

Blackheath and Charlton Cottage Hospital.—Mr. Lewin writes: "In looking through the Tables which accompany the Hospital Sunday Fund Supplement in your issue of the 15th inst., I regret to note that asterisks are placed opposite the name of this hospital, indicating 'No return,' whilst I filled up the form you sent and returned it promptly. ..... I further observe that the figures supplied by me have been applied to the Beckenham Cottage Hospital, occupying the line above that of this hospital." Mr. Lewin is perfectly correct, and his statement explains the error to which it points. We are sure he will accept our apology for its occurrence.

Royal Westminster Ophthalmic Hospital.—Mr. Beattie-Campbell writes: "You state the number of attendances at this hospital last year to have been 7947 instead of 47,682, as appears by the report, page 10, a copy of which I sent you." The explanation of this error is that the number 7947 represents the patients who paid the 47,682 visits, and that this number *being inserted in the return sent to us in the space set apart for visits* (side by side with the correct figure) was inadvertently taken to be what at first sight it appeared to be, and was entered in our Table accordingly. We regret this mishap, especially as it affects the total figures which our Table yields.

Establishment for Invalid Gentlewomen.—Miss Florence Meyrick writes: "I am disappointed to find that you have placed this hospital amongst the Convalescent Homes and Cottage Hospitals. ..... I cannot help thinking we should have been more appropriately placed in the list of General and *Special* Hospitals. The really good hospital work that is done in this house is not sufficiently known, and anything that tends to augment the idea that we only take convalescent or chronic cases is a disadvantage to us." We are very happy to place the claim which Miss Meyrick makes on behalf of her institution before our readers. In our own behalf we have only to repeat what we stated last week in our special article (p. 1227), that in the classification of the various institutions we had adopted the work of the Metropolitan Hospital Sunday Fund Committee.

MEETING AT THE MANSION HOUSE.

ON Wednesday last a numerously attended and influential meeting was held at the Mansion House, in aid of the Hospital Sunday Fund, under the presidency of Sir Sydney Waterlow, the Lord Mayor being prevented by indisposition from taking the chair.

The CHAIRMAN, in opening the proceedings, said that the necessities of London hospitals were perhaps greater than ever. The numbers knocking at their doors were continually increasing, and the work had to be better done than ever, both in the interests of the patients and in the cause of science. There were at the present time more than two thousand beds in the London hospitals which were unoccupied for the want of the necessary funds, not because of any diminution in the number of applicants. It was of course not possible to fill all the beds in any hospital, because they were divided mainly between surgical and medical cases; but there ought not to be more than between three and four hundred beds vacant at any time.

Sir ANDREW CLARK moved the following resolution: "That this meeting pledges itself to use every endeavour to impress upon the inhabitants of London the importance of maintaining the hospitals and medical charities in the utmost efficiency. In furtherance of this object, it urges the clergy and the ministers of religion, in making their appeal for the required £100,000, to point out the advantage of giving through the Hospital Sunday Fund, on account of the nominal cost of so collecting funds for the hospitals." He said: My Lord Bishop, Sir Sydney Waterlow, ladies and gentlemen, in these days we often hear a great deal very boastfully said of the triumphs of civilisation, and undoubtedly they are many and great. It would not be quite so interesting, but it might be much more instructive to hear a little about the failures of civilisation; and if one of us were to stand outside the Mansion House and spend

half an hour in looking at the faces of the people who passed by he would soon discover indications of one of the failures of civilisation. He would discover them in the sad, sickly, anxious countenances of many of the people. It is true that the advance of civilisation is making more and more difficult the possibilities of life and health. The complexities of modern life in a great city are such that there is a constant effort required to keep pace with them and to preserve health in the midst of them. And the very successes of civilisation in medicine add to this difficulty; for modern civilisation, as it is represented by medicine, preserves nowadays many lives that otherwise in the old time would be lost. The very preservation of such lives makes it more and more difficult to keep them in tolerable conditions of health. Our increased knowledge of what is called sanitary medicine has undoubtedly done a great deal to keep pace, to cope with, and to compensate for these increased difficulties of civilisation in relation to life; but our capacities for readjusting our sanitary knowledge and applying it to the business of life are, for the present at least, pretty nearly at an end. A civilisation still advancing will beget new accidents and new diseases, and will render health more and more difficult to preserve in the midst of such a great city as this. People will be wanted to look after these things, and the people that look after them we call doctors. You know it is said of poets that they are born, not made; but it must be said of doctors who have to practise a craft that they are made, not born. How are you to get the doctors, and where are you to get the doctors who are to meet and successfully deal with these increasing difficulties in the problem of civilisation in its relation to health? Well, there is only one way in which you can get doctors; you must get them educated, trained, and disciplined in a hospital. Doctors must be taught to exercise their craft. They cannot get it by any instinct; they cannot get it by the mere reading of books. They can only get it in a hospital. Why may they not get it in private houses? Why may not doctors, like the 'leeches' of old, go about visiting the sick one by one, and learn their profession in that way? It is impossible. It is only by having numbers of diseases collected together, by being able to watch the natural history, as we call it, of diseases, by comparing the effects of remedies in different cases, by keeping records, and so forth, that the doctor can see with any profit the different diseases in such a way as to acquire practical knowledge of them. My point, then, is that if you are to have the diseases and accidents you must have doctors, and if you are to have doctors you must have hospitals in which to educate them. (Applause.) Now, why is it—let me speak for a moment a little more in detail—that you can educate doctors only in hospitals? The reason is obvious. Consider for a moment what a hospital is, I mean a true hospital. There are two things to be regarded. The first thing is its executive administration, and the next its medical work. A hospital, in relation to its executive adminstration, is a great building which is erected upon principles which have been wrought out through generations of experience as the best fitted to receive numbers of persons who are sick. It is, as you know, divided into wards. Each ward is, so to speak, a miniature hospital in itself; and a number of these miniature hospitals put together constitute the great hospital—such, for instance, as the London Hospital. In each ward you have every provision made for receiving sick persons. Here is a spacious room in which you have every appliance for heating and ventilation, and there are beds for a certain number of persons who are to have a certain amount of air each to himself or herself, and there are nurses to attend these persons. Here also are young men to see the patients when they enter, and to take the history of their cases. Here are matrons to superintend the administration below—the kitchen, the laundry, and the rest; and here, last of all, are doctors and surgeons ready to visit the patients in their several wards, each in his separate bed, and to do the best they can for their relief. The medical part consists in this. In each ward there is, first of all, an advanced student, called a clinical clerk, who, when a patient is admitted, goes to him at once and takes his story and writes down all about him. He is usually assisted by the house physician, and between them they get a narrative and record of the case. By-and-by—I am taking the case of a medical ward—the physician comes and sees the patient, and he brings with him all the young students. He discusses the case at the bedside; he comes to a conclusion concerning it, and he tells his students why he has come to this conclusion. He then explains what it is his intention to do, and why he does it. This having been done, prescriptions are written and directions given. The prescription is sent below to the dispensary, where it is prepared, and the directions are carried out by the sister in charge. It is supposed that the students remember the lesson which they have heard, lay it to heart, and use it on the next occasion. After three days the physician visits the patient again, and so the process goes on and on, while the patient remains in the ward. The process is an interesting one. There is the visit of the physician, the determination of the nature of the malady, the laying down of the principles by which it is to be treated, the indication of the future course of it, what should be done and what should be avoided. It is all exceedingly interesting; and all this is done day by day in all the true, great hospitals of which we are now speaking. Now, in addition to this, which may be called the primary and fundamental work of the hospital—that is, the treating of the patients—there is a great deal of most important collateral work done. Like every other good work, this involves a great deal of secondary good work. Whilst the doctor is treating the patient, the nurses, the students, and the house physician seeing that everything is done, working before critical eyes, the patient having a security that the work is well done, which no prince in the land can have better—while all this is being done other work is being carried out scarcely less important. First of all, you are training nurses. Under the direction of the medical officers they are attending the sick, acquiring practical knowledge of nursing, and laying it up for future use, themselves becoming the teachers of others. In the next place, you are educating your doctors. It is in these wards alone that they can acquire that knowledge which is to be useful in the future exercise of their art. Then, still further, you are exercising and perfecting the surgeons. They perform here their operations. Practice, it is said, makes perfect. The repetition of their operations not only enables them to become dexterous and skilful, but to eliminate from the imperfect ways in which all operations are done those things which interfere with success. Again, during this time of treating the patient you are correcting many errors which prevail in the art of medicine, and perhaps discovering new methods of treating disease. Then you will remember that the work is not confined to the persons who are doing it; it is not confined to the doctors, or the students, or the house physicians, or the nurses; it is not even confined to those upon whom, if I may use the phrase, they practise. Not at all; these students and nurses and some of the doctors, either personally or by their writings, will take the knowledge so acquired in the only way in which all true knowledge can be acquired, by observation and experience, and carry it with them to the uttermost parts of the civilised earth. (Applause.) So that it is not only what is done to these poor men, with a guarantee that it could not be better done, but it is that the knowledge used for their behoof is carried to all mankind wherever they may be. But in addition to the work thus done, there are still other services which these hospitals render to the community, and which cannot be passed over on an occasion such as this. In the first place, they afford an immediate refuge to cases of sudden illness. This is a great service. Disease suddenly overtakes a person (unfortunately, disease is too often sudden and unexpected in its attacks), and it becomes a matter of supreme importance to have the case attended to at once. Practically, in this city, and probably in every city, the hospitals are available for such a purpose. If a man is ill, no other certificate is needed. The doors are opened, and in a moment he is carried to his bed, and has the best advice given to him that the hospital can command. This fact of hospitals being made a refuge for sudden illness is another indirect service which they render. Then they prevent the spread of disease. This of course applies more particularly to hospitals devoted to infectious diseases; but, as you will see later on, it is a very important service to the community. And there is yet another service of which I was reminded in conversation with a friend this morning. I do not know that there is anything so trying to the faith of mankind or to the order of their lives as to see those whom they love get sick and grow worse and unassisted. Now, in the great centres of population, such as we know a good deal about in the east of London, it is an enormous advantage to keep down

those terrible revolutionary feelings which are apt to arise in the breasts of men when they look upon those whom they love crowded together in poor miserable hovels, sick and suffering, with no one, as they think, to relieve or care for them. It seems to me that this is a service which hospitals do render to the community, and which the community in these days forgets. (Applause.) But the service which would more immediately attract our notice, the service which is great beyond expression, is that which the hospitals render to the sick working man himself. In all that affects the comforts of the sick-room, in all that affects nursing and food and care, and skill, he is transferred at once from conditions the most unfavourable to recovery to those which are immediately the most favourable. Nor is that all. Imagine what it is when the bread-winner of the house is thrown upon a sick bed. The family is dependent upon him; they have little or no savings; day by day and week by week he is still living; he has a hurried visit from the charity doctor, which cannot perhaps be sufficient to put him in a condition favourable to health, for the bad air, the bad food, the noisy room, the stifling heat, and other things which I leave to your imagination, all contribute to keep him in sickness and prevent his recovery. Think of the economical side of a question like that. If he is kept there, what must happen? His death, and the poverty and ruin of his wife and children. Immediately that it is known that he is so sick and so placed the doors of the hospital are open to him, and he passes from a kind of purgatory to a kind of paradise. Unfortunately that cannot be carried out to the extent to which it ought to be carried out; for, though the sick are many and are increasing in a progressive ratio, the hospital wards are not furnished with the means of receiving all that need them. Then, in passing, I may allude for a moment to the great services which hospitals render to the rich. The rich could not live without them. It is from the hospitals that they get their trained and experienced nurses, their skilful doctors, and all the accumulated knowledge which the hospitals collect and correct and render practical for the uses of mankind. The upper classes do not fully realise that the great work which is done for them in the West-end of London is for the most part done only on the condition that those who do it are hospital physicians and surgeons. I will now pass from a tempting question to give you one or two illustrations of the nature of the work which is done in the hospitals, and of the enormous advance which by their agency has been effected. I mentioned one case last year, but it is so striking and splendid an illustration that I think you will bear with me if I mention it again. There is an operation called ovariotomy, which is essentially the removal of a larger or smaller growth from the stomach of a woman. Now, it is within my remembrance that about thirty years ago this operation was declared to be unjustifiable, that any one who performed it was seeking a false reputation for himself at the cost of the life of his patient. What is the state of things to-day? I have recently seen a return which is beyond cavil from a distinguished operator in this department, and the return shows that he has performed sixty-six successful operations for ovariotomy without a single accident to one of his patients. (Applause.) If that is not a result to be proud of I do not know what is. Let me give another illustration. Not long ago there came to a hospital in London (the Hospital for the Paralysed and Epileptic in Queen-square) a poor man complaining of severe pains, and also suffering from a kind of convulsive attacks. The physician in charge discovered, or thought he discovered, that this was due to a small lump on a certain portion of the spinal cord. The surgeon agreed with him, and they persuaded the patient to permit an operation. The operation was done; it was one of the most difficult conceivable. They found a little lump; they removed it, and the patient became, and, to the best of my belief, still remains, perfectly well. (Applause.) That was a thing that would never have been dreamed of twenty-five years ago. Again, not long since a gentleman in the North of London exhibited symptoms of obstruction of the bowels. The doctor who was summoned diagnosed that the obstruction was in the small bowel. He summoned a surgeon to his aid, and they agreed that the patient must die unless they performed an operation at once. They accordingly performed it; they opened the stomach, and they found that the intestine surrounding the obstruction was mortified, and that there was no chance of its preservation. What did they do? They cut out eighteen inches of the mortified bowel, sewed together the edges of the good part, returned it to the stomach, and in six weeks the man was walking about and fulfilling his duties. (Applause.) I should now like to bring before you the work of this past year. I will give it briefly, because it is admirably set forth in a supplement to THE LANCET, to which paper, as you all know, we owe more than I can express on this occasion in connexion with this Fund. I believe that something like 100,000 copies of this supplement have been spread broadcast throughout the land; so that if the effort made this year is not successful it will certainly not be for want of the country knowing what is needed. Briefly, then, the work of the year amounts to this: 71,000 in-patients have been received into the hospitals aided by this Fund. Of these 31,000 have been relieved, 28,000 cured, 5000 remain under treatment, and 6000 have died. The next point of interest in connexion with the year's work relates, not to the number of patients, but to the number of visits or consultations given to out-patients. These amount to no fewer than 2,500,000. (Applause.) To do all this work, if one man devoted himself to it alone, working ten hours a day, and taking no holiday whatever, it would take him over a century to complete the task. It may be worth while to add one other item of information in regard to the persons engaged in doing this blessed work. There are (omitting consulting physicians and surgeons, who are honorary persons) engaged in this work 299 physicians, 276 surgeons, 148 resident medical officers, and over 14,000 nurses. That is the record of our year's work. I cannot, however, pass over one point in the record, for my heart is full of it, and it will run over as the thought comes to my mind. I am not going to praise the doctors; but let me say that here is a great work which has been done during the past year practically for nothing, and at a cost of self-denial, and at a peril to health and to life, which none of you who are not doctors can fully realise. What makes me pause for a moment to refer to this is the recollection that we have recently lost in our profession a young physician at Guy's, a man of the finest character and the richest promise, and of the truest devotion to knowledge. He had gone on studying, investigating, enlarging our knowledge on some very important points until he was thirty-four years of age, during which time he had been only receiving for teaching a small sum that is not worth mentioning. For thirteen or fourteen years he devoted himself to this department of experimental knowledge, and he received at last, no doubt from the extent and character of his work, the crown of martyrdom at thirty-four years of age. Now that you have seen this year's work, let us ask for a moment what would happen if all these hospitals were suddenly extinguished? What would happen? Well, it is almost inconceivable. Begin at the beginning. What happens in all those populous cities where there are no hospitals? Every now and again they are ravaged by plagues and pestilences, and sometimes the whole population is decimated; and I have no doubt that in a much more fierce and intense degree the same thing would occur here if London had no such places as refuges for the sick. What would happen in respect of our infectious diseases—scarlet fever, diphtheria, small-pox, and the like? They would be confined to houses. These diseases, intensely contagious some of them, spread like wildfire, and in a short time all London would be ablaze with infectious disorders. But that is not all. Many people meet with accidents and injuries. The care of these accidents and injuries, thanks to Sir Joseph Lister, we now understand, requires above all things what are called antiseptic precautions and a pure atmosphere. At home the atmosphere gets polluted with the discharges; blood poisoning, as it is euphemistically called, sets in, and not only the patient cannot recover, but the chances are that the worst forms of erysipelas or some such affection will seize upon the dwellers in the house and carry them off. Let me shorten the matter by saying that it is almost as certain as a simple sum in arithmetic, that if these hospitals were wiped out, not only would this great city be soon decimated, but we should have no doctors and no nurses, and what a pandemonium it would be I leave it to your imagination to conceive. There can be no doubt about it, we must keep our hospitals. It is no abuse of language to say that they are amongst the most precious possessions of our modern civilisation. And if we keep them we must recognise the fact that, while their income is diminishing, the demands which are necessarily made upon them are con-

tinually increasing. A great number of reasons for this, if I had time to go into them, ought to be exposed in this place. Perhaps the first thing which has hit the hospitals very hard is the diminution in the proprietary income of old hospitals on account of agricultural distress. Then another is—I am sorry to have to say it, but I believe it—that there is a diminution in the strength and the virtue of giving. I may be wrong, but that is the strong impression upon my mind. There was a time when a large percentage of people in this and other great cities gave not only of their substance, up to a certain point, but of their services. I think I am justified by my experience in saying that the virtue of giving and of serving has got into a weakly state for some reason or other which I shall not stop to inquire into more closely. Then there is another reason, and that is the foundation and maintenance of improper hospitals, which divert funds in a direction in which they ought not to be employed and rob the great hospitals of the support which they ought to receive. A doctor who cannot get on in the ordinary way takes to studying the great toe, and he discovers something about it that has never been discovered before. In the course of his studies he ascertains that the diseases of the organ are not only supremely important in themselves, but that they have the most intimate relation to all the other serious diseases of the body. (Laughter.) He also invents a wonderful instrument whereby he can look into the great toe and see what is threatening, and prevent all those terrible things which happen in the organ and affect the whole system. He goes to his friends, shows them his instrument, and tells them of his discoveries. They then club together and establish a Hospital for the Treatment of the Diseases of the Great Toe. (Laughter.) This hospital is manned by his friends, who, having joined in the venture, must make it a success. They soon get patients who are convinced of the vast importance of the great toe; marvellous cures are effected, and all sorts of frightful diseases are prevented. They then have an annual meeting; they have a chairman who sets forth, bashfully, in the presence of the great physician, the diseases of the great toe, the wonderful things that had been done, the great service which has been rendered by the hospitals the terrible prejudice it has had to encounter, the determination that this great institution shall be liberally supported notwithstanding the prejudices of the medical profession, and of those who herd along with them. (Laughter.) Then there is another difficulty, which I touch with great regret because it is a difficulty which comes from the men whom I call crotchet-mongers, very odd, but very true. There are a certain number of men, very earnest and well-intentioned, who are ready to make any sacrifice for the truth, but who have an unfortunate faculty of seeing only what is wrong, and not seeing what is right in anything. There is a friend, for example, who has a great notion that the treatment of the out-patient department of great London hospitals is an awful iniquity and ought to be put down. People will not listen to him, and he gets angry and assails the hospitals in every direction, charging them with abuse and corruption. At last people begin to say 'There must be something in it; the man would never go on in this way if it were not true'; and thus the out-patient department of a great hospital is often robbed of half its income, and that upon the foundation of a mere mistake. Let me advert one moment to this question of the out-patient department. I will only say three things about it. First, let me say that I have perhaps the largest experience of any physician in London of out-patient practice in the London Hospital, and I can say of it that it would have been simply impossible for me to have practised my profession in the way in which I am engaged in it with anything like a pretension to efficiency unless I had had that work at the hospital. Why? Where else could I come face to face with the early aspects of disease? Where else could I come face to face with those first small indications of disease which tell of its near approach, and which are still within the power of art to avert? Only in the out-patient department of the London Hospital. If they do away with these departments of our great hospitals I venture to say that they will inflict a cruel, irreparable wound on practical medicine in this country. I have been told that they are grossly mismanaged, and that it is a shame to allow people to come to them and get out-door relief when they ought to be paying for advice; that it is encouraging one of the worst forms of immorality and corruption. On one occasion one of these narrow-minded but good men came to me at the London Hospital, and said: "Oh! you are at this dreadful work; you ought to be somewhere else, and not encouraging this improper charity." "What do you find fault with?" I asked. "Why, in coming along," he said, "I saw a man with a black coat on among the patients." "Did you," I said; "let us have him in." He went out and brought him in. He was a pale, thin, wasted, anxious-looking, sickly man. "What are you?" I asked. "I am a clerk." "What wages do you get?" "Twenty-eight shillings a week." "What family have you?" "I have a sick wife and six children." Why, he was much worse off than the commonest working man with twenty-four or five shillings a week. If that is the sort of abuse you object to, I face that abuse, and I say it is a great charity and not a great wrong. (Applause.) But there has been a special inquiry with reference to this subject. I have read in the pages of THE LANCET that an inquiry was held the other day in Manchester, and you know they are a practical people there, and have a character to maintain. They entered into this question *con amore*, and were determined to get rid of the abuse of the out-patient department. They investigated the matter carefully, I am told; and what do you think was the conclusion they came to? It was that about 8 per cent. of the people who attended at the infirmary might have contributed a little to some provident dispensary where they could have got relief. Eight per cent.! Will you think for a moment of the enormous advantages which I have pointed out to you coming from these hospitals, and will you let that 8 per cent.—the few who could "pay a little"—wreck all that? It is not common sense, it is not reasonable. It is unutterable folly and cruelty to try to wreck the doing of so great a good for so small an evil. Are you to expect that any work is to be perfect? Never. So far as I know, the perfection of a work is begotten of its imperfections; and in this respect a hospital is no better than any other work, and no worse. What, then, is to be done? There are only two things before us to be done. I think I have said enough to you about hospitals, what they do to the community, and what they are likely to continue to do. Now, what are we going to do? The demand is increasing, and the subscriptions are diminishing. There is only one of two things to be done: either you must increase your subscriptions, or you must go upon the rates. Which will you do? Will you go upon the rates? I hope not. (Applause.) The finest thing about the English character, I think, is its individuality with its voluntary efforts. I question much whether there is any civic virtue compared to that individuality which at all events used to be the characteristic of a great Englishman; and it seems to me (if it is not presumptive in me to say it) that the State has been showing a little unwisdom in the way in which it is going, in trying the other side of civic civilisation, the casting of people into one mould. That would indeed be a sad thing for England and for the world. Surely the true secret of a nation's greatness is that you shall encourage individuality to every conceivable extent short of interfering with the rights of the neighbour or the safety of the State. A man's individuality is the expression of the will and power of God in him, and if he is a true man he ought to cultivate it to the utmost within the conditions I have stated. Will you exchange the individual life, the energy, the enterprise, the personal feeling and love, the voluntary effort—will you exchange all that for a rate-supported hospital, cold, lifeless, mechanical, devoid of that very feeling of personal interest and love which ought to dominate every work of that kind, starving the moral faculties of that exercise which gives them their life, to create a rate-supported hospital, or a series of rate-supported hospitals? Is that what you will do? Heaven forbid! I cannot imagine for a moment a rate-supported hospital which can in any way compare with a voluntary hospital. They are not so well administered, they are not so successful, they are not so comfortable, and they are not so welcome to the poor. The work which they do compared with others is sorry work; and, though I am reluctant to say so, they are sometimes very extravagant, sometimes very corrupt, and there is not one of them that I know that you could set before this company as an example of what a hospital ought to be. No; never can I believe that any body of Englishmen would ever raise their voices in support of substituting for a noble voluntary hospital a miserable, lifeless, dull, mechanical, rate-supported institution. (Applause.) I am

afraid there is no other alternative than increasing our subscriptions. We cannot go on the rates. When we consider the question from the moral and physical standpoint, when we consider the inexpressible value of these hospitals in all conceivable relations, I am sure not only that we shall not go upon the rates, but we may depend, I think, quite safely that the money which we need will come in, and that very shortly. Without going over the ground in any detail, without even doing more than alluding to the subject, I will only say that one of the most wonderful things is the influence which hospitals have upon a great people like this. Everyone benefits by them—old and young, rich and poor, peasant and prince; nobody can be exempt from them. We are living in a sort of atmosphere of the good which these hospitals do. We breathe it, and, I was almost going to say, we become part of it. What return are we to render for such inexpressible service? Well, I know not what return we can make but one. We ought to increase very liberally our subscriptions, and we ought to give much more liberally than we are in the habit of doing our personal service. If the hour were not so late I should like to say a word upon this subject; but I will not press it much longer upon you. When I say that we must increase our subscriptions, I know what your answer will be. But let me put in a word beforehand. The income of London goes on steadily increasing. You will tell me that your incomes are diminishing, that your expenditure is increasing, that the taxes laid upon you every quarter are heavier than ever, and that you have a harder struggle than ever to keep your place in the civil and social position in which you find yourselves. That is quite true; but that is from your point of view. But now from my point of view these are the very reasons why you should give; and if you strive and struggle and pinch in order to give, I am as certain as I am of anything that you will receive a revelation the greatest ever vouchsafed to man; you will discover that through the fires of personal sacrifice your simple giving will be transformed into a divine charity which will give life and fruitfulness to all that you do, and will fill the hearts of all of those who give and those who receive with light and gladness. (Loud applause).

The Bishop of DERRY, in seconding the resolution, said: We have all listened with great pleasure and instruction to the remarkable address which has just been delivered by Sir Andrew Clark, and we must all feel that we have had an intellectual treat of no ordinary kind, and have also had our ideas upon the subject of hospitals much enlarged. The address, admirable as it was, was illuminated with touches of humour which we shall not soon forget. I think the picture of the "Great Toe Hospital" is likely to linger in our memories a long time. I would only venture to suggest that if a universal medicine could be discovered for the patients, it might be called "*To pharmacon.*" (Laughter.) After listening to Sir Andrew Clark, and speaking as I do in the presence of our Chairman—one of whose titles to honour is that he was the first to give practical effect to Hospital Sunday,—it seems to require that sort of proverbial modesty which is wrongfully attributed to the country from which I come to permit me to speak at all. None of us can deny that Sir Andrew Clark has brought before us an overwhelming case for hospitals and for Hospital Sunday, which is now so near upon us, and in which so many of us are interested. He has quoted these most remarkable statistics from the paper which I hold in my hand—a paper which I believe has been sent to 100,000 persons—I refer to THE LANCET Special Supplement. Possibly, to an ignorant person like myself, one of the most interesting parts of the paper was the sketch giving one day's work in one single London hospital; but the writer, after amazing us by the multiplicity of the work, and yet by the singleness of direction through it all, shows us that no fewer than twenty-four general hospitals are doing every day of the year twenty times the amount of work which he has so powerfully described in his sketch. I will only briefly refer to that side of Hospital Sunday which naturally interests me most—I mean that which regards the preachers upon the occasion. It seems to me that it would be one of the best things for the preachers—not, indeed, this year, for they cannot have the opportunity—if Sir Andrew Clark could be induced to "coach" (as we used to say at the University), those of the clergy who are to preach at the important churches, and communicate to them some of the fire and passion which he threw into those remarks that were so well received by the audience when he spoke of the danger of hospitals being thrown upon the rates, and of the love which Englishmen have for voluntary effort. I think that a preacher on an occasion of that kind will succeed most in getting at the affections of the people if he can speak from his own experience, from what he has himself seen, if he can throw out some incidents of life into a pathetic isolation on the one hand, or if, on the other, he can bring before men the overwhelming aggregate of sickness in London and treated in these hospitals. It has occurred to me to remember that as nearly as possible this day seventy-four years ago the battle of Waterloo was well over, and the series of actions which preceded it, Ligny and Quatre Bras. There seem to have been literally acres of torn and mangled flesh, an amount of human suffering appalling to contemplate; and I take it that would be no exaggeration to say that all the vast amount of suffering from that great battle hardly equalled the agony of those who are wasted by sickness in the battle of life among the four millions of the poor in London. How touching is the case of the sick children whom we see in the wards of our hospitals, the deformed, the scrofulous, the rickety, the wizened. Never in the whole history of England has there been such need amongst the sick as at the present time, for the simple reason that the population is so much greater; and never has there been such medical skill and enthusiasm to meet it. I believe that both inside and outside the Established Church there never have been men more fitted to deal with the subject and bring it home to the hearts of the men and women of England. Sir Andrew Clark's address suggested one most interesting point. I do not, of course, know how it is in medical circles, but I know that we who are laymen very often hear in quarters that are really quite astonishing the old idea which we imagined was exploded long ago—namely, the objection that hospitals are meant to experiment in for the benefit of the rich, that the poor man is made the subject of the *experimentum in corpore vili*, and it is actually made an objection that medical schools are attached to these hospitals. Now we have had a most complete answer to that fallacy from Sir Andrew Clark, who has absolutely demolished it, and has rendered a very valuable service in so doing. Surely it is perfectly plain that science decreases, so to speak, with one hand, and increases with the other. It decreases the sum total of human suffering, and it increases the sum total of human knowledge. It wins from agony by a beautiful compensation the very weapons by which in the long run agony will be diminished and in some cases utterly removed. In this way the medical school attached to a hospital is of the highest value; and that is clearly one reason why hospitals should be supported. You will pardon me if for a moment I refer to another matter, though it comes closer to theological ground. In that beautiful chapter the 12th of the First Epistle of Corinthians, St. Paul gives us that glowing list of the different χαρισματα—gifts of the Spirit—and amongst them he mentions the gifts of healing. We are sometimes asked about those gifts of healing, and people, half ashamed, hang their heads and say, "Oh! the gifts have passed away, there is an end of them." Passed away! Have they passed away? Have we not evident proof that they have not passed away? I remember that a great commentator upon Scripture, in handling this very subject, speaks of the shields of gold which were set up by King Solomon, and were taken away by the enemies of Israel, and were replaced by shields of brass under Rehoboam; and the commentator says: "So was it with the gifts of healing. The first gifts were shields of gold; they had been taken away; the Church has them not, and what remain are but shields of brass." Ah! is it quite certain that the reverse of that statement is not the truth? What if the last gifts are the best? What if they were gifts of brass—those so-called miraculous gifts of healing which have passed away? And what if the gifts which remain were the shields of gold? Take some proofs of it. Go to one of our hospitals; see the skill, the strength, the tenderness, and the knowledge, all bowing down before decrepitude and decay; see how nothing which tends to the service of suffering humanity is looked upon as mean or low, but rather as elevated and noble. Think, again, of those accumulated stores of the physicians, of the marvellous skill acquired in a practice like Sir Andrew Clark's. Think of the risks of death incurred; and, I will add, consider the risk of the crown of martyrdom which there is before the enthusiastic physician. The world has

been touched, and hard would men's hearts have been if they had not been touched, by what we must call the martyrdom of Father Damien. A great physician, speaking at the remarkable meeting over which the Prince of Wales presided, and spoke with such masterly common sense, as he always does, implied that leprosy was probably to be stamped out, but that in the course of the process other precious lives would be called for, and he evidently assumed that medical science would find martyrs to go forth to face that risk. I am one of those who believe that we cannot expect to win by one spasm of enthusiasm or assurance what medical science wins by decades of observation—ay, and decades of suffering. It seems to me that the true faith-healing is, after all, coincident almost with science-healing, and that the only sort of faith very much worth having by you and me is a faith that "worketh by love." (Applause.) Let me say this one word in conclusion. One of the greatest blessings and glories of Hospital Sunday, I believe, is that it is a centre of unity amongst many who are otherwise divided. Our convictions are very dear and very sacred. We cannot, indeed, agree to agree—that is a ghastly sort of process—but we can agree to differ, like Christians and gentlemen. But this we do see about Hospital Sunday, that all our mere sectarianisms are hushed in the presence of the majesty of pain; and still, as the servants of Christ walk down the corridors of a hospital from time to time, they seem to hear the footsteps of a mysterious Form; they seem to look upon One whose lips are pale and whose head is circled with the marks of a crown of thorns. True hearts know who He is. The disciples durst not ask Him, "Who art thou?" knowing that it is the Lord, who feels for suffering and who heals sickness. (Applause.)

The resolution was then put and unanimously adopted.

On the motion of the Ven. Archdeacon Sinclair, seconded by the Rev. S. A. Walrond, a vote of thanks was passed to Sir Sydney Waterlow for presiding.

HOSPITAL SUNDAY SUBJECTS AND PREACHERS.

THE following is a list of the subjects of sermons to be delivered in the respective places of worship on the 23rd inst., on behalf of the Hospital Sunday Fund:—

Westminster Abbey.—10 A.M., Rev. Canon Aubrey Moore (Keble College, Oxford); and 7 P.M., his Grace the Archbishop of York.

St. Paul's, Great Portland-street.—11 A.M., Rev. Charles J. Williamson (vicar); and 7 P.M., Rev. H. W. Hussey.

All Saints, Caledonian-road, Islington, N.—11 A.M. Rev. A. Wardroper (Vicar). Subject: "The Beggar Lazarus"; text, St. Luke xvi., 20. 6.30 P.M., Rev. P. Swatman, M.A. (late Chaplain, Guy's Hospital). Subject: "Sir, come down 'ere my child die;" text, St. John iv., 49.

St James-the-Less, Upper Garden-street, Westminster.—Morning service, Rev. Oswald Pryor Yerburgh, M.A. (Curate of St. Peter's, Eaton-square). Subject: "Our Duty towards the London Hospitals." Afternoon (children's service), Rev. George David Wm. Dickson, M.A. (Vicar). Subject: "Neither shall there be any more Pain." Evening service, Rev. George Aug. Mayo How (Vicar of Bromley, Middlesex).

Holy Innocents, 20, Ribblesdale-road, Hornsey, N.—11 A.M., Rev. F. E. Coggin (St. Margaret's, Westminster): text, Phil. ii., 12, 13. 6.30 P.M., Rev. Tilden Smith; text, St. Luke xvi., 19, 20.

St. George the Martyr, High-street, Borough.—Morning service, Rev. Burman Cassin, M.A. (Rector); text, St. John v., 2. Evening, Rev. John Gilbert Surman (Rector of Healing, Lincolnshire); text, St. Luke xix., 10—"The Son of Man is come to seek and to save that which was lost."

St. Peter, Garford-street, Limehouse.—11 A.M., Rev. P. Alpe, M.A. (Vicar); text, Romans i., 14—"The Debt of Humanity." 7 P.M., Rev. W. B. Greer, M.A. (Curate in charge of St. Bartholomew's, Dalston); text, St. Luke xiv., 16—"The Great Supper."

Holy Cross, Cromer-street, St. Pancras, N.W.—11 A.M., Rev. Albert Moore (Vicar), subject, "The Sick"; 4 P.M. (children's service), the Vicar, subject, "The Communion of Saints in Suffering"; and 7 P.M., preacher, the Assistant Curate of St. Barnabas, Kentish Town.

St. Mark's Vicarage, Notting-hill, W.—11 A.M., Rev. B. Reynolds, M.A. (Prebendary of St. Paul's and Diocesan Inspector of Schools); subject, "The Maker's Sympathy with Suffering." Evening service, Rev. W. E. Emmett, M.A. (Vicar); subject, "The Healing of Suffering."

St. Andrews, Leytonstone.—Morning service, Rev. W. Manning, M.A. (Vicar); subject, "Hospitals, their Work and their Claims." Evening, Rev. J. H. Hodges (Chaplain of the Manor House, Dalston), on the same subject.

Sacred Heart, Wimbledon.—Morning service, Rev. P. Rochford, S. J.; subject, "The Sick Poor our Lord's Representatives amongst us." Evening, Rev. Francis Scoles, S. J.; subject, "The Return for Love."

SS. Mary and Thomas of Canterbury (Hospital Chapel), High-street, Ilford.—11 A.M., Rev. J. A. Fyfe (St. Mary, Somers-town); 4 P.M., Rev. W. H. C. Malton (Asst. Chaplain, London Hospital); and 6.30 P.M., Rev. H. Barber, All Saints, Manor-park.

Wesleyan Chapel, Archway-road, Highgate.—Morning ervice, Rev. W. D. Walters; subject, "Benevolence to the Sick regarded as Service done for Christ."

Wesleyan Chapel, Westminster, S.W.—11 A.M.; subject, "Christian Duty as interpreted by our Lord's Example." 6.30 P.M.; subject, "Miraculous Cures by the Peasant Physician."

Free Methodist Church, Bellenden-road, Peckham.—Morning service, Rev. Richard Wilton; subject, "The Thorn in the Flesh." Evening service, Rev. R. Wilton; subject, "The Good Samaritan."

Primitive Methodist Chapel, Northumberland-park, Tottenham.—Morning service, Rev. R. R. Connell; subject, "Christian Compassion."

Baptist Chapel, Upper Holloway.—11 AM. and 7 P.M., Rev. J. R. Wood; text for morning services, Luke 13-32, "Healing, Sacrifice, Perfection."

Essex Church (*Unitarian Christian*), The Mall, Notting-hill-gate.—11 A.M., Rev. W. Carey Walters; subject, "Human Brotherhood." 7 P.M., Rev. W. C. Walters; subject, "Divine Discipline."

St. Stephen's, Old Ford, Bow.—Rev. J. Pullein Thompson (Vicar).

St. Sophia (*Greek Church*), Moscow-road, Bayswater.—The Archimandrite, Dionysius Plaisas; text, Matt. xxv., 36, "I was sick and ye visited me."

Old Gravel Pit Chapel, Hackney.—J. D. Williams; text, "Art thou in Health, my Brother?" and "The Pleasures of Imagination." (In memoriam, Mark Akenside, Physician.)

Bethany Congregational Church, South Hackney.—The Hospital Sunday collection at this church has been deferred until June 30th, when Pastor Joseph Watson will preach two sermons, the text at the morning service being "Sick and Visited," and in the evening "Healing Leaves."

Jewish Synagogue, Poet's-road, Dalston.—The sermon and collection in this Synagogue will take place at the usual Sabbath service on Saturday, June 22nd. Preacher, the Rev. Hermann Gollancz, B.A. Subject: "The Healing Art among the Hebrews of Ancient Times and of the Middle Ages."

HEALTH REPORT OF INDIA FOR 1887.

THE Annual Report of the Sanitary Commissioner with the Government of India states the average strength of the European troops in 1887 to have been 63,515, exclusive of those on active service in Burma. The admissions into hospital during the year amounted to 1370, the deaths to 14·20, the mean daily sick to 70·28, and the invalided to England to 22·37 per 1000 of strength. With the exception of the invaliding, which shows a slight increase, these ratios are all lower than in the preceding year. The relative health of the troops in the three Presidencies was as follows:—

Presidency.	Average strength.	Ratio per 1000 of strength. Admissions.	Deaths.	Invaliding.	Mean sick.
Bengal ..	40,601	1426	14·83	18·67	69·2
Madras ..	11,725	1250	12·96	30·79	77·4
Bombay ..	11,188	1292	13·23	28·19	66·6

Compared with the results for 1886, these ratios show a reduction in the admissions, deaths, and mean sick in all

three Presidencies, except in the death-rate of Bombay, where there has been a slight increase. The invaliding from Bengal and Bombay was nearly the same in both years, but from Madras there was an increase of one-fourth. The excess of admissions in Bengal over those of the other Presidencies was chiefly caused by intermittent fever; and of deaths, by cholera and enteric fever. In all the Presidencies there was a decrease in the prevalence of fevers, but most marked in Madras; and in Bengal and Bombay there was also a considerable reduction in venereal diseases, while in Madras these showed a slight increase. The most fatal disease among the troops is still enteric fever, by which the deaths amounted in Bengal to 4·09, in Madras to 2·98, and in Bombay to 3·40 per 1000 of strength. These ratios are all lower than in 1886, but higher than in any of the preceding fourteen years except 1880 in Bombay, when the ratio rose to 5·76, and 1878 in Bengal, when it was 4·69 per 1000. Of the larger stations in India, the highest death-rates from enteric fever were furnished by Ahmednagar, Lucknow, and Secunderabad; and of the smaller garrisons, by Murree, Benares, Roorkee, Cherat, Sialkot, and Fyzabad. The influence of age on the mortality by this disease was well marked, the deaths per 1000 of strength at each age having been 5·37 under twenty-five, 2·63 from twenty-five to twenty-nine, and 0·68 from thirty to thirty-four. In like manner the period of residence seems to have a marked influence, for the death-rate among men in the first and second years of service in India was 7·13 per 1000, from the third to the sixth year 2·13, and from the seventh to the tenth only 0·82; but these results may be in a great measure due to the ages of the men. The seasonal influence is somewhat different in the three Presidencies, the greatest number of cases occurring in the second quarter of the year in Bengal, and in the third in Madras and Bombay.

Next to enteric fever, the most fatal disease was cholera in Bengal and Bombay, and hepatitis in Madras, which had a very low cholera death-rate. In the Madras command only 7 deaths from cholera occurred, of which 4 were at Secunderabad, and 1 each at Kamptee, Bellary, and Thayetmyo. In the Bombay Army there were 28 deaths, being in the ratio of 2·50 per 1000 of strength; 17 of them occurred at Neemuch in a force of 509, or 33·50 per 1000, and 5 at Mhow in 1420 men, or 3·50 per 1000. There were also 2 at Ahmednagar, 2 at Kirkee, and one each at Indore and Poona. In Bengal the deaths were 2·27 per 1000; the disease was pretty generally spread with the exception that only one case occurred in Bengal proper, which includes Fort William, Dum-Dum, and Barrackpore. Nowgong furnished the highest ratio of deaths, amounting to 14·08 per 1000. Of the 92 deaths in Bengal by this disease, 10 occurred at hill stations and 10 among troops on the march in the Punjab. The report states that "the mortality from cholera among the general population of Central India was greater than in any year since 1875, and this may account for the high average mortality among European troops stationed within the area of comparatively excessive incidence of the disease in Bengal. On the other hand, there were more deaths from cholera among the general population of the North-west Provinces and Oudh than has as yet been recorded in any one year; and in Lower Bengal, judging from the record of mortality, the disease reached a maximum of prevalence without affecting the European troops in any degree approximate to its incidence among the general population." This seems to afford presumptive evidence of the value of the sanitary measures carried out by the Medical Department of the Army. The disease appears to have been of a very fatal character where it did occur among the troops, the proportion of deaths having amounted to 69 per cent., or upwards of two in every three cases. Apoplexy and heat-stroke gave rise to 147 admissions and 54 deaths, being in the proportion respectively of 2·3 and 0·85 per 1000 of strength; upwards of one-third of the cases terminated fatally. Hepatitis was the cause of considerable mortality in Madras, the death-rate from it having been 3·16 per 1000 of the strength, or double that of Bengal and four times that of Bombay. In Bengal proper, however, the ratio was even higher than in Madras, having amounted to 4·55 per 1000. The admissions from venereal diseases were somewhat lower than in 1886 in Bengal and Bombay, but slightly higher in Madras; they still furnish, however, the very large proportion of upwards of one-fourth of the whole admissions into hospital. The relative prevalence of the different forms of disease in 1887 was: primary venereal sores 142, secondary syphilis 29, and gonorrhœa and other venereal diseases 190 per 1000.

A table is given in the report showing the experience of newly arrived regiments in 1887 during the first year of Indian residence compared with the army generally, the respective numbers under observation being 3279 and 63,515. The admissions were 1394 and 1370, the deaths 12·50 and 14·20, and the mean sick 68·1 and 70·3; so that, while there was a slight excess of cases among the newly arrived, there was a lower rate of deaths and of constantly sick. The mortality from enteric fever was 4·88 in the newly arrived and 3·76 in the army generally.

The mortality from all causes, including accidental and violent deaths, at different ages was as follows:—Under twenty-four years, 14·32; twenty-five to twenty-nine, 13·9; thirty to thirty-four, 12·86; thirty-five and upwards, 14·10 per 1000, at each period of life.

The mortality of the officers in India was in the ratio of 11·94 per 1000; but if the strength and deaths in Europe or beyond the sea, whether on furlough or sick leave, be added, it amounted to 12·34 per 1000, or nearly 2 per 1000 under that of the men. The death-rate of officers of the British Service was 9·42, while of those of the Indian Service it was 13·31 per 1000, including deaths at home and on furlough.

The mortality of the women in 1887 amounted to 18·20 per 1000—a higher rate than in either of the preceding three years, and the admissions to 831 per 1000.

In an average number of 6333 children the ratio of cases was 649, and of deaths 51·79 per 1000—both higher than in the preceding year. The death-rate was lowest in Bengal. One-fourth of the deaths were caused by convulsions and teething.

THE SUSPECTED POISONING OF A LIVERPOOL MERCHANT.

THE preliminary inquiries in what promises to be a *cause célèbre* have just been completed. The social position of the prisoner and the deceased, with other circumstances, have combined to invest the case with somewhat sensational surroundings, and "the Maybrick case," as it has been called, has been the subject, not only of very full reports, but also of leading articles in most of the London and provincial daily papers. The inquest, which was held by Mr. Samuel Brighouse, the coroner for the West Derby district of Lancashire, extended over several days, resulting in a verdict of wilful murder against Florence Elizabeth Maybrick, the widow of the deceased gentleman. The inquiry before the magistrates occupied the whole of two days, at the close of which the accused lady was fully committed for trial for wilful murder at the next Liverpool assizes, which will commence about the end of next month.

Stripped of all sensational statements, many of which may be entirely false, the case appears an extremely simple one, the following being the principal facts disclosed before the coroner and magistrates. The deceased, Mr. James Maybrick, was a cotton merchant, having an office in Knowsley-buildings, Tithebarn-street, Liverpool, his residence being Battlecrease House, Riversdale-road, Garston, within easy distance of Liverpool. The prisoner and he had been married for some years, the issue of the marriage being two children, and to all appearances they lived happily together until March 29th last, the date of the Grand National, which both attended. Here the prisoner would appear to have given the deceased cause of offence, which induced him to express himself strongly to her. She resented this, and, speaking to a lady friend, said "that she would give it him hot and heavy for speaking to her like that in public." They subsequently quarrelled, and the prisoner called upon Mr. Hopper of Liverpool (who was their medical attendant) on March 30th, suffering from a black eye. She complained of her husband, and wished for a separation, but Mr. Hopper succeeded (as he believed) in effecting a reconciliation. Some time afterwards one of the servants found a number of "fly-papers" steeping in water in a basin on one of the tables in the bedroom, covered over with a towel. These papers and the water could not subsequently be traced. About this time the deceased, who was in his fiftieth year, and had always enjoyed fairly good health, though he was

somewhat fond of taking medicine, including, it was suggested, arsenic, began to feel unwell, and went to London to see his brother, Mr. Michael Maybrick, the well-known vocalist and composer. He consulted Mr. Fuller, who prescribed for him, the prescription being dated April 14th, and it is a remarkable coincidence that the discovery of the fly-papers occurred just about this date. Mr. Fuller's prescription contained no mention of arsenic, but in one of two bottles which had been made up from it by Messrs. Clay and Abraham, of Liverpool, and which had been found in the lavatory of Battlecrease House, arsenic was subsequently found by Mr. Edward Davies, analytical chemist. The other bottle, which deceased kept at his office, was found free from arsenic. On the very day when the prescription was made up the prisoner purchased one dozen fly-papers at another chemist's, near to her house, and some days later she obtained two dozen more at a third chemist's. After taking the medicine, the deceased became worse, and Mr. Richard Humphreys of Garston, who had not previously attended him, was called in, visiting him on April 28th. He found him complaining of a fear of dying, and of a peculiar feeling about his heart; he was also afraid of paralysis coming on. These symptoms had appeared that morning, and the deceased attributed them to a cup of tea he had drunk. He had experienced similar feelings from drinking tea before, and had made up his mind to give up tea in future. He complained of a dirty tongue, and asked Mr. Humphreys to clean it for him. On the same day, at ten o'clock in the evening, Mr. Humphreys was sent for hurriedly. The deceased complained of stiffness in his limbs, which soon passed off, and never returned. As he still continued very ill, Dr. William Carter was sent for, and first saw him on May 7th, about 5.30 P.M. The deceased complained of having suffered from vomiting and diarrhœa for several days; he had a bad taste in his mouth, great thirst, and a feeling as of a hair in his throat. On examining him, Dr. Carter found the lungs, heart, and brain normal. The tongue was extremely dirty, but there was no offensive odour, and the throat was red, dry, and glazed. He was rather weak, but very restless, kicking off the clothes. Dr. Carter expressed an opinion that he was suffering from acute dyspepsia, brought on by some irritating food. He saw him again on the 9th, when, in addition to the former symptoms, there was also extreme tenesmus. That day Dr. Carter suspected irritant poison, and examined a bottle of Neave's food, but with a negative result. He saw Mr. Maybrick the next day, when he expressed himself as feeling much better, only requiring some sleep to make him all right again. Dr. Carter and Mr. Humphreys thought him decidedly worse; the right hand up to the knuckles was numbed and absolutely bloodless, indicating failure of circulation. A bottle of Valentine's meat juice was given by Mr. Michael Maybrick to Dr. Carter, who examined it by Marsh's and Reinach's tests, both giving decided indications of arsenic being present. This same bottle was subsequently examined by Mr. Davies, who found that it contained 411 grains of liquid, in which he found half a grain of arsenic. The deceased lingered till the following day (Saturday, May 11th), when he died. Circumstances appearing to seriously compromise the prisoner having now come to light, the police were communicated with, and, as no certificate of death was forthcoming, the coroner was also informed of the death, who ordered a post-mortem examination. This was made on the 13th by Mr. Alexander Barron, pathologist to the Liverpool Royal Infirmary, in the presence of Dr. Carter and Mr. Humphreys. There were no appearances of any natural cause of death, but those of some irritant poison. The viscera were sent to Mr. Davies; subsequently the body was exhumed, and more viscera were removed and sent to him. He found arsenic in the liver, the estimated quantity being one-eighth of a grain in the whole liver; there was no arsenic in the stomach and its contents, or in the spleen; but in the intestines and kidneys there were minute traces. In addition to the articles previously mentioned, Mr. Davies also examined a pan and basin used by the deceased for warming up some Neave's food, which had been given to his brother by the prisoner in a jug. He found arsenic in the pan, jug, and basin, though there was only a very minute particle of solid food left adhering to the sides of each. He obtained samples from the stock bottles used by the assistants of Messrs. Clay and Abraham in preparing Mr. Fuller's prescriptions, and proved that each was free from arsenic. A bottle of Valentine's meat juice which had not been opened was found free from arsenic. A bottle, containing liquid and black powder, found in the house, contained a strong solution of arsenic, with also a large quantity of arsenic in the solid form. Another bottle contained a solution of arsenic, with a little solid arsenic at the bottom; and the sediment in another bottle contained from fifteen to twenty grains of arsenic, with a few drops in solution. In a glass containing milk and a rag Mr. Davies found about fourteen grains of arsenic, from which he judged that there must have been about twenty grains originally in the tumbler. There was also a sealed package containing a powder labelled "Poison for cats." This consisted of 91·44 per cent. of arsenic and 8·42 per cent. of carbon. The package also contained a handkerchief upon which there was a trace of arsenic and black particles similar to those in one of the bottles. On this handkerchief was also the prisoner's name. A bottle of Price's glycerine contained two-thirds of a grain of arsenic, while another bottle procured, not previously opened, had none. Fly-papers similar to those purchased by the prisoner contained two grains and a half of arsenic in each paper, with a small quantity of arsenite of potash; the arsenic dissolved easily in cold water. On testing the comparative specific gravity of the Valentine's meat juice found to contain arsenic with a pure sample, Mr. Davies concluded that the arsenic must have been added in a liquid form.

The case for the prosecution was very ably conducted by Superintendent Bryning of the county police, who showed throughout the greatest fairness towards the prisoner. The medical evidence was extremely well given, and that of Mr. Davies was a model of scientific accuracy. There were a very large number of articles examined by him, and the labour involved must have been very great. The summing up of Mr. Coroner Brighouse was very able, and it is satisfactory to note that the prisoner has had all along the services of Mr. Pickford, barrister, who has had previous experience in the defence of persons charged with arsenic poisoning.

THE ARMY ESTIMATES.

IN the debate on the Army Estimates on Monday last attention was called to the occurrence of some cases of typhoid fever in the Ship-street Barracks, Dublin. Mr. Stanhope stated that he "was afraid the condition of the barracks was exceedingly bad. When he made his visit there the other day, he came to the conclusion that, as soon as it could be done, a portion of the barracks should be pulled down." As regards the Richmond Barracks, in which there had been one or two cases, he had them inspected, but only "certain defects in the drainage, not of a very grave character, had been found." He thought the occurrence of fever in the barracks was connected with the general condition of Dublin. In the course of the discussion several remarkable opinions were advanced. For instance, Mr. Hanbury said that "every day about 5 per cent. of our soldiers were on the ineffective list owing to ill health; and this ill health, he believed, was in a great degree due to the insanitary condition of many of our barracks." The Army medical returns, however, show that 37 per cent. of these men are non-effective from venereal disease and 9 per cent. from injuries, causes which cannot by any stretch of imagination be referred to the condition of the barracks. We cannot but think that for some portion of this inefficiency Parliament itself is responsible, as being a result, in some degree at least, of its action in abolishing the Contagious Diseases Acts. Mr. Hanbury also complained that "there were medical men receiving large salaries whose duty it was to see that the barracks were in a healthy state, but the unhealthy state was only discovered after the deaths occurred." But he entirely overlooked the fact that the medical men may, and do, report the existence of sanitary defects, and recommend the necessary measures for their removal, but have no power to carry out these recommendations. The power lies with the House of Commons, for unless they vote the needful amount of money the removal of insanitary conditions is an impossibility. It may be that the Government is also to blame, because it cuts down the estimates to an extent which prevents the necessary sanitary works being undertaken; but surely for this the medical

officers cannot in fairness be held responsible. It is their duty to bring to the notice of the military authorities anything which they consider to be exercising an injurious influence upon the health of the troops, and to suggest the appropriate measures to counteract it, but beyond this they have no power, and with this, therefore, their responsibility ceases. Mr. O'Connor suggested that attention should be directed to the water-supply and the system of filtration, but the barracks are supplied from the same source as the rest of the inhabitants, and filtration does not appear to exercise any influence in the way of destroying the germs in water which are the carriers of typhoid fever. We believe there is no reason to suspect the water-supply of the barracks to be the cause of this disease.

ST. MUNGO'S COLLEGE, GLASGOW.

(FROM A CORRESPONDENT.)

ON May 17th, 1889, the first meeting of the governors of this newly-founded institution was held in the Glasgow Chamber of Commerce, under the presidency of Dr. W. G. Blackie. St. Mungo's College having therefore become a reality, it may be well to devote a little space to a summary of the various movements which have terminated in its foundation. University reformers have been labouring during the past years to abolish the monopoly which the Senate of the University at present possess as regards the training for, and granting of, degrees in Medicine. Foremost among those agitants were the managers of the Glasgow Royal Infirmary, who have all along sought, but sought in vain, to have their school and hospital recognised by the University Senate. In more ancient times, before the erection of the present University buildings in the west end of the city, and consequently before the inauguration of the Western Infirmary adjoining, the Royal Infirmary was attended by the students of the University, the University buildings being then almost within a stone's throw of the hospital. Things went very well then, so far as the infirmary was concerned, and for over eighty years it derived a pretty fair revenue annually from the fees paid by those students receiving clinical instruction in its wards. In 1870, however, the University removed to the present site, and in 1875 the connexion between it and the Royal Infirmary was severed by the erection of the Western Infirmary, a hospital erected close to the University, and partly owned by it. In the same year, however, the managers of the Royal Infirmary obtained a charter authorising them "to afford facilities and accommodation to individual teachers for instructing students in medicine, surgery, and the collateral sciences usually comprehended in a medical education, in addition to encouraging the clinical instruction of students as hitherto in the said infirmary." So says the charter. The granting of this charter was strennously opposed by the Senatus of the University, but without success, and a sum of money having been subscribed, a medical school was founded, known as the Royal Infirmary School of Medicine, the lectures therein delivered being recognised by all the licensing bodies in Britain. The Senate of the University, however, refused to recognise the lectures as equivalent to their intra-mural course, and consequently only intra-mural students were permitted to become candidates for their medical degrees, the students of the Royal Infirmary having to content themselves merely with a licence. The next step therefore was, if possible, to compel the Senate to accept the Royal Infirmary lectures as qualifying, and so constitute the Royal Infirmary School of Medicine a College of the University of Glasgow, on a par with the single College at present in existence. This likewise was naturally strongly opposed by the Senate, and after the withdrawal of the Universities (Scotland) Bill of 1887 the managers of the Royal Infirmary determined to have a Bill on their own account, and the St. Mungo's College Bill was accordingly drawn up. This Bill, a very mild one, and a very fair one in every sense, was introduced in the House of Commons by Mr. Baird and Mr. Caldwell, both members for Glasgow, and by Mr. Mason, one of the members for Lanarkshire; and while it placed the Infirmary School students on a par with University students as regards proceeding to graduation, it placed the full authority in the hands of the University Court, the authoritative body in the University. Even this Bill was opposed by the Senate, both in the Glasgow Town Council and in the House of Commons. Petitions flocked in in favour of the measure, but public affairs had so taken up the time of our legislators in Parliament that the St. Mungo's College Bill, along with others, was left to its fate. Not to be baulked, the managers of the infirmary sent a deputation to Lord Lothian, the Secretary for Scotland, in order to lay their case before him, and through him before the Government, with a view to securing special legislation on their behalf in the new Scottish Universities Bill. Lord Lothian received the deputation, heard their case, and suggested that their first step should be incorporation, and pointed out several methods open to them. The result of this advice was that, in spite of renewed opposition from the University, the Board of Trade, on April 16th, 1889, granted a licence for registration under the provisions of the 23rd Section of the Companies Act of 1867. This, one of the methods suggested by the Marquis of Lothian, was deemed the most feasible. This, therefore, is the first step of the ladder surmounted. How far the governors of the new College may be successful in their affiliation schemes remains to be seen. At first only a medical education was intended as heretofore; but latterly, as the necessity for lectures in other arts and sciences was forced upon the managers, provision was made for such, and accordingly St. Mungo's College hopes one day to rival the single existing College of the University in all its departments. No one can say as yet whether the governors will or will not see their ideas fully realised, but the institution has been founded for a very laudable purpose, and certainly deserves support. A very fair start has been made, in spite of the many obstacles to be surmounted in such an undertaking, and perhaps before many years are past we shall see the new institution a flourishing College of the University. At the first meeting of the governors, held, as I have said, on May 17th, there was a large attendance, and the following resolutions were passed: "That a committee be appointed to take charge, subject to the approval of the governors, of all financial, Parliamentary, and legal matters of or relating to the College, not being academic, and not falling within the province of the Academic Committee or Endowment Committee, and to be called the Business Committee. That a committee be appointed to take charge, subject to the approval of the governors, of all matters connected with the classes to be established in the College, and the professors, lecturers, teachers, and students, pending affiliation to a university, and to be called the Academic Committee. That it be remitted to the Business and Academic Committees to meet in conference and to report their views as to the steps which ought to be taken to put the College on a proper footing. That a committee be appointed, to be called the Endowment Committee, to procure funds for the purpose of endowing the College." The registered offices of the Association are at 93, West Regent-street, Glasgow, the secretary being Mr. Henry Lamond, while Mr. McCowan will act as treasurer.

THE PARIS UNIVERSAL EXHIBITION.

(FROM OUR SPECIAL CORRESPONDENT.)

Infectious Fevers and Water-supply.

SOME weeks before the opening of the Exhibition I indicated that there were grave sanitary defects in Paris which would not fail to cause inconvenience and give rise to some danger. Already complaints of this description have arisen. When the Exhibition was first opened there was a general chorus raised concerning the insufficiency of the sanitary accommodation. The authorities at once proceeded to build a great many more urinals in the Exhibition grounds. Then another cry arose, especially from the English visitors. The urinals were situated in too prominent places. The authorities were thus fairly perplexed by a cross fire from those who were asking for more accommodation and those who were too readily shocked by the number and prominence of those conveniences. Something has been done in the way of planting shrubs and trees to act as screens, but this has taken time and may yet be considered not quite effective. The closets which I have had an opportunity of inspecting are trapped and have

a good flush of water. On no previous occasion have the public in France been provided with such good closets; and, whatever complaints may be made, the improvement is undoubtedly remarkable and praiseworthy. The closets, unfortunately, are not numerous enough, yet I have not noticed any crowd; nevertheless, when there are more than 200,000 persons, all on a limited space of ground, there must be moments when the available accommodation fails to meet the requirements of such an exceptionally large concourse of people.

More important is the letter published by *The Times* concerning the experiences of an English lady suffering from measles who went to the Hospital of St. Antoine. The whole system for the treatment of infectious disease is undergoing a radical change in Paris. Efforts have been made to institute separate hospitals for the reception of infectious cases, and there is even some attempt to provide special ambulances. A few years ago I rode in an omnibus by the side of a person suffering from the early stages of small-pox. The omnibus stopped at the door of one of the large hospitals, the patient was assisted out by his friends and taken into the hospital, the omnibus went on with its usual passengers, and on inquiry I found that the conductor was in the habit of stopping before the hospital to allow patients to alight, and never troubled to inquire whether their cases were infectious or otherwise. Now, at least, there is some attempt to abolish this most deplorable and dangerous state of affairs. The indignant lady who wrote to *The Times* was herself conveyed to the hospital in an ambulance carriage, and this is a sign of progress. The St. Antoine Hospital, she was told, will soon be pulled down; and doubtless, from a sanitary point of view, nothing can be said in favour of this most unsuitable and antiquated building; but, on the other hand, such institutions—as, for instance, the Hôpital Bichat—are models to all the world. The isolation of infectious cases, and the accommodation that should be provided for paying patients are questions which have undergone so many changes of late, that I would not venture to express an opinion without making some inquiry to ascertain how far the promised improvements have been realised. I will, however, take an early opportunity of seeing Dr. Chantemps, President of the Municipal Council, and one of the principal promoters of the movement for the creation of isolation hospitals.

A greater danger to visitors to Paris than that arising from the defects already mentioned is due to the insufficiency of the water-supply. Paris is in a most unfortunate position. It cannot be said that the water-supply is bad. On the contrary, at immense cost, Paris has secured one of the best water-supplies enjoyed in any town of Europe. According to the last report Paris was receiving 121,000 cubic metres of the Vannes water, 21,000 cubic metres derived from the Dhuis, and from the St. Maur springs 5000 cubic metres—in all, 147,000 cubic metres of pure and excellent spring water. This, however, is not enough. The daily consumption is estimated at 158,000 cubic metres. The deficiency is not very great; still it is enough to compromise the whole town; for when the store of good water is exhausted the Seine water is provided, and this through the same channels and without warning. Thus, though a person may, as a rule, drink wholesome water, he will receive for a week or so during the course of the year water taken from the Seine, which is very likely to be contaminated. Again, a person may drink a glass of water in one quarter of Paris which is perfectly pure, while in another district he may, on the same day, get water that is certainly not free from the occasional presence of injurious organic matter. At the present moment, the supply of spring water having reached a low ebb, the Seine water is turned on in the ninth, thirteenth, fourteenth, and fifteenth arrondissements. For twenty days these unfortunate districts are to receive only the Seine water; then the first, second, and tenth arrondissements are to be served in the same way. In the pavilion of the Prefecture of the Seine, situated in the central court or garden of the Exhibition, will be seen three glass tanks of water side by side. One receives the water of the Ourcq canal, another of the Seine, and the third of the Vannes. The first two are more or less opaque, are of a green-yellowish tint, and vary more or less in aspect from day to day. But that which contains the water of the Vannes is always perfectly transparent and never changes. Members of the Municipal Council have urged, so far in vain, that the water-supply should be increased. There are numerous projects, and recently a resolution was passed by the Council calling upon the Legislative Chambers to discuss at once the scheme for bringing the waters of the Avre to Paris. How far this question of urgent and practical utility will be preferred to matters of a more political character, cannot yet be determined. It is, however, certain that the water-supply cannot be increased in time to benefit the visitors to the Exhibition. Therefore, proper precautions must be taken. Small portable filters should form part of the indispensable articles to be brought over with the ordinary and personal luggage. Before drinking water that has not been boiled or satisfactorily filtered, careful inquiries should be made as to whether or not the district is supplied from the Seine. That the Seine water may be dangerous will be obvious to all who are acquainted with the neighbourhood of Paris. The intake for the supply is of course outside the town, and some little distance up the stream, but it is unpleasantly near the large manufactories of *poudrette*, or human guano. Also there are boats containing tanks which are filled with the contents of cesspools, and the manure is thus conveyed up the river to the works. A few years ago some scavengers, in their impatience to finish their day's toil, instead of conveying all the soil the barges contained to the works, simply threw a considerable portion over into the river. Fortunately this was discovered, and now there is a service of inspection organised both day and night, and careful watch is kept that these tank barges should not again contaminate the water. But there are other causes of pollution, and it is an undeniable fact that many outbreaks of typhoid fever in Paris have occurred about a fortnight after the substitution of Seine water for the usual and pure supply of water from the Vannes or the Dhuis. The question of water-supply is therefore a very serious problem which the French authorities should lose no time in settling, and it would be well if the pressure of public opinion could be brought to bear so as to hasten its solution.

Paris, June 18th.

QUARANTINE.

THE following is the report of the Quarantine Committee, appointed by the Royal College of Physicians, April 17th, 1889, to consider an inquiry on the subject of quarantine received from the Colonial Office. The members of the committee were Dr. Graham Balfour, Sir Joseph Fayrer, Dr. Cayley, and Dr. Seaton.

"The Committee, after fully considering the question submitted to the College by the Secretary of State for the Colonies as to the proper periods of detention for purposes of quarantine in yellow fever, cholera, and small-pox, and that contained in a despatch from the Governor of Barbadoes as to the incubation periods of those diseases, begs leave to report to the College as follows:—

"That the incubation period of yellow fever and cholera is uncertain, and the Committee is of opinion that it is unwise to impose quarantine restrictions in the case of these diseases.

"The Committee is further strongly opposed to such restrictions generally, which it considers harmful and vexatious.

"That, in the case of small-pox, the Committee is of opinion that the incubation period of the disease does not usually exceed a fortnight, and that suitable precautions based on this knowledge are desirable.

"Signed, on behalf of the Committee,

"T. GRAHAM BALFOUR,

"Royal College of Physicians, May 9th, 1889." Chairman.

THE LONDON HOSPITAL MEDICAL COLLEGE.—The Duke of Cambridge, K.G., has consented to present to Sir Andrew Clark, Bart., F.R.S., the senior consulting physician to the above hospital, on July 15th, his portrait, by the late Frank Holl, which was exhibited in the Royal Academy last year, and which was subscribed for by the medical and surgical staff and many friends of the hospital, to mark their sense of Sir Andrew Clark's long and distinguished services at this hospital and college. A replica of the painting will, at the same time, be presented to the College, to be hung on the wall of the library. His Royal Highness has also consented to distribute the prizes afterwards to the students and the nursing probationers. A card of admission will be sent in due course.

THE ALLEGED ATTEMPT AT EXTORTION.

THE following names, additional to those already published, have been appended to the expression of sympathy with Mr. Malcolm Morris printed in our last impression:—

Walter Coulson.
J. Braxton Hicks.
Edmund Owen.
G. Buckston Browne.
Robert Barnes.
Sydney Ringer.
Stamford Felce.
E. Parker Young.
Julius Althaus.
Scanes Spicer.
W. Spencer Watson.
T. Hughlings Jackson.
J. Risdon Bennett.
Christopher Heath.
F. J. Gant.
Walter Pye.
Percy Boulton.
Henry Davis.
John Easton.
Theodore J. Preston, Staff Surgeon R.N.
Frederic Shepherd.
William H. Brace.
Alban Doran.
Henry Sewill.
Charles Moore Jessop.
Edward Bellamy.
Geo. Danford Thomas.
M. F. Manifold.
Augustus Greatrex.
M. Prickett.
Herbert E. Friend.
J. Ernest Lane.
James Stewart, Clifton.
Thomas Buzzard.
W. Sinclair Thompson.
Leslie Ogilvie.
James Herbert Stowers.
E. Symes Thompson.
W. Allchin.
V. D. Harris.
William Cholmeley
W. Adams Frost.
C. A. Gordon, C.B., Surg.-Gen.
William H. Day.
Charles Hy. Ralfe.
W. E. Porter, New Southgate.
Amand Routh.
William Ewart.
J. J. Pringle.
Alfred Carpenter.
W. B. Hadden.
Robert Maguire.
H. Cripps Lawrence.
E. D. Mapother.
C. D. B. Hale.
J. Scott Battams.
F. A. Brooks.
George Eastes.
Jabez Hogg.
R. W. Goddard.
W. B. Owen.
David Ferrier.
J. Bland Sutton.
Sidney Martin.
A. C. Butler Smythe.
Herbert Sieveking.
J. Ingleby Mackenzie.
James Startin.
Frederick Wallace.
P. H. Pye-Smith.
John H. Galton, Norwood.
Arthur Turner, Anerley.
J. Langdon Down.
T. Bryant.
Albert Napper, Guildford.
George Gwynne Bird
J. Burney Yeo.
E. O. Hopwood.
P. Percival Whitcombe.
C. M. Campbell.
A Vintras
Robert Boxall.
E. J. Hopwood, D. Surg.-Gen.
R. Farquharson, M.P.
Grailly Hewitt.
A. Emrys Jones, Manchester.
William Duncan.
William Aitken, Woolstone.
C. Theodore Williams.
W. E. Luscombe, Newark.
Clement Dukes, Rugby.
Owen Daly, Hull.
F. W. Pavy.
R. W. Bickersteth, Liverpool.
J. Keser.
Septimus W. Sibley.
V. C. J. Van Der Straaten, Chesterfield.
W. J. Collins.
F. C. Bryan, Littlehampton.
Fred. W. Allwright, Brighton.
Archibald H. Jacob, Dublin.
Norris F. Davey, Abergavenny.
W. J. Noel Bell.
F. B. Hulke, Deal.
W. F. Webster, Shropshire.
H. Marcus Allen, Brighton.
John Marshall, J.P., Dover.
Rawdon Macnamara, Dublin.
R. W. Foss, Stockton-on-Tees.
Wm. Adams.
Reginald Harrison, Liverpool.
Sidney Coupland.
J. J. O'Bryen, Sydenham.
Kenneth Millican.
J. Langton.
Johnson Herbert, Whitby.
Fredk. H. Alderson.
Sydney Jones.
Fred. A. Hill.
Frederick T. Roberts.
A. Kelsey, Redhill.
H. W. Ewen, Redhill.
Herbert Thompson, Sevenoaks.
Spencer T. Smyth, Bournemouth.
J. Hayward Hough, Cambridge.
Thomas Britton, Harrogate.
W. Whitla, Belfast.
J. F. Briscoe, Esher
S. H. Byam.
T. M'Call Anderson, Glasgow.
John Edwin Eddison, Leeds.
William H. Platt.
Dudley Buxton.
A. Pearce Gould.
F. M. Mackenzie.
Henry Waldo, Clifton.
M. Charteris, Glasgow.
A. B. R. Myers, Brigade-Surgeon.
Albert Kisch.
Samuel Wilks.
Maurice Davis, J.P.
E. Hurry Fenwick.
E. Markham Skerritt, Clifton.
Phin. S. Abraham.
C. J. Cullingworth.
H. Heygate Phillips, Reading.
Charles Vasey.
W. Stuart Low, East Dulwich.
Dawson Williams.
C. Holman, Reigate.
J. Roche Lynch.
G. H. Brandt, Royat-les-Bains.
W. Owen Jones, Bowdon.
J. Swain Scriven, Derby.
John M. Bright, Forest-hill.
H. Charlton Bastian.
Shirley F. Murphy.
W. Jones Morris, Portmadoc.
Fred. B. Hullowes, Redhill.
W. A. Berridge, Redhill.
Clement Godson.
W. J. Walsham.
R. Muzio Williams.
Woodhouse Braine.
Charles Carter Braine.
Ebenezer Toller.
Henry John Knight, Rotheram.
W. A. Garrard, Rotheram.
John Cavafy.
Bertram Thornton, Margate.
T. Duke
Charles E. Cormack, Vichy.
Seymour J. Sharkey.
H. H. Clutton.
George Crichton, Twickenham.
C. W. Chaldecott, Dorking.

Members of the profession who wish their names appended to the above resolution are requested to kindly inform Dr. Sidney Phillips, 21, Upper Berkeley-street, W.

UNIVERSITY OF CAMBRIDGE.—At a meeting of the Master and Fellows of Trinity Hall, held on the 15th inst., Walter Holbrook Gaskell, M.A., M.D., F.R.S., of Trinity College, was elected to a Fellowship and appointed Prælector in Natural Science.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5045 births and 3031 deaths were registered during the week ending June 15th. The annual rate of mortality in these towns, which had been 16·5 and 17·7 per 1000 in the preceding two weeks, declined again last week to 16·6. During the first eleven weeks of the current quarter the death-rate in these towns averaged 18·4 per 1000, and was 2·4 below the mean rate in the corresponding periods of the ten years 1879-88. The lowest rates in these towns last week were 11·1 in Brighton, 12·7 in Nottingham and in Birkenhead, and 13·3 in Norwich. The rates in the other towns ranged upwards to 21·0 in Sunderland, 23·4 in Wolverhampton, 26·3 in Manchester, and 33·0 in Preston. The deaths referred to the principal zymotic diseases in these towns, which had been 392 and 430 in the previous two weeks, were last week 429; they included 132 from measles, 107 from whooping-cough, 81 from diarrhœa, 44 from scarlet fever, 36 from diphtheria, 29 from "fever" (principally enteric), and not one from small-pox. No deaths from any of these zymotic diseases was recorded during the week in Norwich, while they caused the highest death-rates in Plymouth, Manchester, Hull, and Preston. The greatest mortality from measles occurred in Bolton, Leeds, Halifax, Manchester, Hull, and Preston; from scarlet fever in Salford and Plymouth; from whooping-cough in Plymouth, Preston, and Bradford; and "fever" in Derby. The 36 deaths from diphtheria in these towns included 26 in London, 3 in Manchester, and 2 in Salford. Small-pox caused no death in any of the twenty-eight great towns; and no small-pox patient was under treatment at the end of the week either in the Metropolitan Asylum Hospitals or in the Highgate Small-pox Hospital. The number of scarlet-fever patients in the Metropolitan Asylum and London Fever Hospitals at the end of last week was 572, against numbers declining from 610 to 570 on the preceding four Saturdays; 33 cases were admitted to these hospitals during the week, against 49 and 39 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 162 and 205 in the preceding two weeks, declined last week to 169, and were 67 below the corrected average. The causes of 58, or 1·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Wolverhampton, Birmingham, Nottingham, Bradford, Sunderland, and in five other smaller towns. The largest proportions of uncertified deaths were recorded in Sheffield, Derby, Leicester, Newcastle-upon-Tyne, and Preston.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined from 22·3 to 19·4 per 1000 in the preceding three weeks, rose again to 20·5 in the week ending June 15th; this rate exceeded by 3·9 the mean rate during the same period in the twenty-eight large English towns. The rates in these Scotch towns ranged last week from 11·1 in Perth and 18·1 in Edinburgh to 23·2 in Glasgow and 24·9 in Paisley. The 524 deaths in the eight towns showed an increase of 27 upon the number in the previous week, and included 35 which were referred to whooping-cough, 26 to measles, 17 to diarrhœa, 10 to diphtheria, 4 to "fever" (probably enteric), 3 to scarlet fever, and not one to small-pox; in all, 95 deaths resulted from these principal zymotic diseases, against 85 and 76 in the preceding two weeks. These 95 deaths were equal to an annual rate of 3·7 per 1000, which was 1·4 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined from 53 to 29 in the previous three weeks, rose again last week to 35, of which 27 occurred in Glasgow and 4 in Dundee. The 26 deaths from measles showed a slight further increase upon recent weekly numbers, and included 13 in Glasgow, 8 in Aberdeen, and 4 in Leith. Of the 17 deaths referred to diarrhœa, 6 occurred in Dundee and 5 in Glasgow. The fatal cases of diphtheria, which had been 10 and 2 in the preceding two weeks, rose again last week to 10, and included 6 in Glasgow. Three of the 4 deaths from "fever" occurred in Glasgow. The deaths referred to the principal diseases of the respiratory organs, which had been 89 and 93 in the previous two weeks, declined last week to 88, and

were 6 below the number in the corresponding week of last year. The causes of 50, or nearly 10 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 19·7 and 21·3 per 1000 in the preceding two weeks, further rose to 22·2 in the week ending June 15th. During the first eleven weeks of the current quarter the death-rate in the city averaged 24·2 per 1000, the mean rate during the same period being 16·2 in London and 16·6 in Edinburgh. The 150 deaths in Dublin showed an increase of 6 upon the number in the previous week; they included 3 which were referred to whooping-cough, 2 to diarrhœa, 1 to measles, 1 to "fever," and not one either to small-pox, scarlet fever, or diphtheria. Thus the deaths from these principal zymotic diseases, which had been 6, 8, and 12 in the preceding three weeks, declined to 7 last week; they were equal to an annual rate of 1·0 per 1000, the rate from the same diseases being 1·8 in London and 1·0 in Edinburgh. The 3 deaths from whooping-cough exceeded by 1 the number in the previous week; but the fatality of "fever" and of measles showed a decline from that recorded in recent weeks. The deaths of infants under one year of age were within 2 of the number returned in the preceding week, while those of elderly persons showed a further increase upon recent weekly numbers. Four inquest cases and 6 deaths from violence were registered; and 48, or nearly one-third, of the deaths occurred in public institutions. The causes of 12, or 8 per cent., of the deaths in the city were not certified.

THE AUSTRALIAN COLONIES.

A return just published by the Victorian Government statist gives an estimate of the population of the Australian colonies for 1888. Other statistics are also given, and the percentages of marriages in the seven colonies per 1000 of the population were: Victoria, 8·03; New South Wales, 7·37; Queensland, 8·63; South Australia, 6·51; Western Australia, 7·18; Tasmania, 6·6; New Zealand, 5·97. The death-rate was: Victoria, 15·34; New South Wales, 13·54; Queensland, 14·66; South Australia, 11·92; Western Australia, 15·91; Tasmania, 14·11; New Zealand, 9·43. The percentage of births stood thus:—Victoria, 32·49; New South Wales, 36·18; Queensland, 37·77; South Australia, 33·34; Western Australia, 35·88; Tasmania, 33·1; New Zealand, 31·22.

THE DEATH-RATE OF BENGAL.

During the last two generations the death-rate in the Indian Army has fallen from 60 to 20 per 1000. The native population, however, are dying off with greater rapidity than ever. A circular has just been issued by the Sanitary Commissioner of Bengal showing that deaths from *fever* in that province have, in spite of a diminution in Calcutta, been steadily increasing, until in 1887 they rose to nearly 1,100,000 in a population of 66,000,000—that is, nearly three-fourths of the entire death-rate of the province, or more than twice as many deaths as by all diseases put together.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon Howard Fleetwood Babington, M.B., resigns his commission (dated June 19th, 1889).

ARMY MEDICAL RESERVE OF OFFICERS.—Acting Surgeon Edward Cureton, 1st Shropshire and Staffordshire Artillery Volunteer Corps, to be Surgeon, ranking as Captain (dated June 19th, 1889).

ADMIRALTY.—The following appointments have been made:—Surgeon Edward G. Swan to the *Hibernia*, Surgeon Edward H. Williams to Malta Hospital, and Surgeon Herbert Canton to the *Duke of Wellington* (all dated June 7th, 1889).

MILITIA.—3rd Battalion, the Sherwood Foresters (Derbyshire Infantry Regiment): Surgeon and Honorary Surgeon-Major W. A. Walker resigns his commission; also is permitted to retain his rank, and to wear the prescribed uniform on his retirement (dated June 15th, 1889).

VOLUNTEER CORPS.—*Artillery:* 1st Gloucestershire: Surgeon-Major (ranking as Major) F. Weatherly resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Corps on his retirement (dated June 15th, 1889).—*Engineers* (Fortress and Railway Forces): 1st Devonshire and Somersetshire: The following Officers are transferred from the 1st Gloucestershire (the Western Counties) Engineer Volunteer Corps on its division into two corps, viz.:—Surgeon G. B. Fraser to be Surgeon (dated June 15th, 1889); Acting Surgeon M. L. Brown, M.D., to be Acting Surgeon (dated June 15th, 1889). The above-named Officers will be considered to have received commissions of the same rank and date as those previously held by them in the 1st Gloucestershire (the Western Counties) Engineer Volunteer Corps.—*Rifle:* 1st Volunteer Battalion, the Cheshire Regiment: John Wilkinson, M.B., to be Acting Surgeon (dated June 15th, 1889).—2nd (Berwickshire) Volunteer Battalion, the King's Own Scottish Borderers: Samuel Macvie, M.B., to be Acting Surgeon (dated June 15th, 1889).

Correspondence.

"Audi alteram partem."

HOSPITAL SUNDAY.

To the Editors of THE LANCET.

SIRS,—The approach of Hospital Sunday must be my plea for urging, as President and Treasurer of the Fund, that the public should respond in a liberal spirit to the appeal which will be made to them on the 23rd inst. in all the churches and chapels of the metropolis. Altogether the institutions claiming our sympathy are 163 in number, of which ninety-three are hospitals, twenty convalescent homes, and fifty dispensaries, and the deficiency of income last year amounted to nearly £100,000. There is no need for me to enlarge upon the merits of these institutions, their readiness in relieving those who are afflicted, the benefits they confer on the more fortunate by checking the spread of disease, and their success in mitigating the said consequences of poverty when combined with physical maladies. But by your courtesy I desire to point out the unique character of this annual occasion, and the opportunity which it affords for unostentatious and practical sympathy with a cause which is noble and Christian beyond dispute. Every inhabitant of the metropolis, irrespective of creed or denomination, is offered the privilege of easily gratifying his instinctive sympathy with the suffering poor; he is not subjected to pressure; of imposture there can be no fear. The hospitals are beginning to look hopefully to the result of the annual collection as a means by which their usefulness may be maintained; and it is therefore most desirable that the contributions on the 23rd should be as large as possible. Should any of your readers be absent from public worship or not in London on that day, may I remind them, by your kind permission, that all sums sent to me will be duly acknowledged, and that a box is placed outside the Mansion House for anonymous donations.

I am, Sirs, yours obediently,

JAMES WHITEHEAD,
Mansion House, London, E.C., June 20th, 1889. Lord Mayor.

THE UNITY OF MEDICINE.

To the Editors of THE LANCET.

SIRS,—The question really pressing at the present moment is, whether the existing arrangement of a separate College of Physicians and College of Surgeons is the best that could possibly be for the welfare of the community. If it is not the best, all that is being said in favour of the established order of things is only frivolous competition, faction and debate, of one-sided and interested individuals. One might infer from the fetish worship of certain Charters that these Charters should not be even breathed upon, and should be perused only through glass, like the muniments of prehistoric cities or of antediluvian dynasties. Do the representatives of either the College of Physicians or College of Surgeons imagine that while all the world is moving they can stand still? They may conjoin or disjoin as much as they will, they may improve (alter?) examinations as they may find fit, but their separate existence is an anachronism and a drag on the progress of scientific medicine. Science is a unity, and the separation of scientific surgery from

scientific medicine is a specialisation of the most pernicious character.

There are many side questions on the matter of medical education which I dare not now intrude on you. But what I would especially draw your attention to is—(1) the great advancement in the scientific educational demands on officers of the army and navy, which place the scientific acquirements of the medical officers in these services at a disadvantage; and (2) the increasing confidence of the British public in patent medicines. In 1870 the revenue from duty paid on patent medicines was £72,353; in 1885 the duty paid was £170,337. When one remembers that the duty is in the proportion of one-ninth of what the vendor of a quack nostrum charges *in addition*, the magnitude of the pecuniary total in comparison with the pecuniary total of what represents the vested interests of the Colleges, and the reversionary interests of certain individual members of these corporations, makes the comparison not encouraging.

I am, Sirs, your obedient servant,

June, 1889. T. W. NUNN, F.R.C.S. Eng.

THE COMMISSION ON HIGHER EDUCATION IN LONDON.

To the Editors of THE LANCET.

SIRS,—The Royal Commission appointed to inquire whether any and what kind of new university is required for the advancement of higher education in London has sat, taken evidence, and reported, and for the present at least things are likely to remain much the same as they were before, only a little more so. The unanimity of the report is apparent and superficial, not real. The three teaching representatives—half the Commission—show up the weak place in the report in the note which they have appended. They indicate the difficulty, which seems insuperable, of continuing under one head metropolitan teaching and examination for the empire, and by so doing knock the bottom out of the arguments and suggestions elaborated in the unanimous report.

It seems curious that the Commissioners should not have clearly separated the motives of the two very distinct agitations which led up to their appointment: the one, of science teachers for higher teaching; the other, of medical teachers for lower degrees. These two movements converged and met at one point only—viz., in the desire their promoters had to "brand their own herrings." The report of the Commission will, I apprehend, bring complete satisfaction to no one. The petition of the Medical Colleges, which gave articulate expression to what has been compassionately termed "the medical grievance," was unanimously disapproved by the Commissioners. University and King's Colleges, whose recent mutual amenities must be entertaining to those who reflect on their previous histories, will scarcely relish being put off with a tinkered London University. I think I shall be able to show that the appeals made by the Commissioners to the present University are unreasonable, and likely to be resisted very emphatically, at any rate by Convocation.

The gist of the report amounts to this: That the University of London shall, within a reasonable time, revolutionise itself so as to take up the objects of the Association for promoting a Teaching University upon lines more radical far than any yet agreed upon by either the Senate or Convocation; to take the knowledge of its undergraduates on trust, as certificated credit for study and work; while its graduates are to pass upon a degraded standard. Its constituent and associated colleges are to be "in or near London"; eighteen out of a reconstituted Senate of thirty-eight are to represent directly or indirectly the teaching element. These eighteen senators are to be elected from "Faculties" to be composed exclusively of teachers. These Faculties are to appoint "boards of studies" to consult and to advise; and the Commission would be well satisfied if here, again, Convocation had no voice.

In their criticisms upon the present constitution and management of the University and its standard of examinations, the Commissioners can hardly have been guided by the evidence laid before them. We are told that its examinations tend "to divert the attention of students from the regular courses of instruction"; that the "syllabus" confines the limits of the students' reading. In the case of the medical examinations, it would be truer to say that the regulations have directed rather than diverted attention to certain branches of knowledge; it is not too much to say that it is mainly due to the Preliminary Scientific Examination that classes for instruction in Biology, Physics, and Chemistry (above the ordinary course) have been established in the various medical schools. As to the "syllabus," in most of the medical examinations this errs on the side of width rather than of narrowness; in many cases the single word—e.g., Anatomy, Surgery, Medicine—is all that is vouchsafed to direct the reading of the candidate. Indeed, experience has shown that where teachers have attempted to specify the lines of examination in accordance with their own sweet will, endless confusion and alteration have arisen. The good old "Matric." has recently again been through the teachers' mill, and is now refashioned almost past recognition. The Commissioners, indeed, would strike out the Matriculation with a stroke of the pen in favour of a teacher's assertion of what his pupil knows. So, again, the Preliminary Scientific is to follow the Matriculation into the realms of things forgotten; at any rate, it is to be waived in the case of licentiates of the medical colleges, who in future will come forearmed with a desperate array of scientific knowledge. What importance the medical colleges attribute to preliminary science may be gathered from the fact that in their Draft Charter, Clause 15, they proposed to turn their licentiates into Doctors of Medicine without any guarantee of any additional knowledge, scientific or otherwise. Lastly, the Commissioners "think that a standard of attainment appropriate for honours ought no longer to be required by the University for an ordinary or pass degree. The evidence has not left on our minds the impression that this is the case in any other Faculty." Now, Sirs, "would you be surprised to hear" that, if the Intermediate M.B., the Pass M.B., and the M.D. Examinations at London University be compared with similar examinations in the other Faculties, it will be found that *the percentage of those who pass is higher in every case in the medical than in any of the other Faculties?* Take the Doctor's degrees first: the percentage of passes at the D.Lit. is 15, at the LL.D. 44, at the D.Sc. 46, while at the M.D. it is 80. At the B.A. Pass the percentage of successes is 59, at the B.Sc. 56, at the LL.B. 64, while at the M.B. it is 78. At the Intermediate B.A. the percentage of passes is 59, at the B.Sc. 50, at the LL.B. 53, while at the M.B. it is 78. The minds of the Commissioners must have been unimpressionable indeed if, with this evidence before them suggesting a relatively lower standard as obtaining in all the medical examinations, they could report as quoted above. Moreover, let it be remembered that many facilities and extenuating circumstances are permitted in the Medical Faculty which are unknown in the others. The Preliminary Scientific may be taken out in parts, the Physiology of the M.B. Intermediate, may be postponed for a year by those who find their brains overtaxed, and the rudiments of Logic have been knocked out of the M.D., as too severe a test for such very learned persons.

The high reputation of the present University, built up solely upon the standard required at its *pass* degrees, the Commission mildly suggests, is to be utilised to sanctify the new departure which we are asked to make—a departure whose most conspicuous feature shall be that the "higher education" which it is to inaugurate will be incapable of facing the high standard of examination which sufficed for less "educated" times. If the future University of London is to be a machine for turning out with hitherto unparalleled celerity unmatriculated, unscientific M.D.'s, and to enter into a downward competition with the University of Brussels and some northern academic bodies, many will be anxious to be released from what may then serve as a trade mark, but which will cease to be an academical distinction. To be suspended, after the fashion of the Prophet's coffin, 'twixt pass and honours, as the Commissioners suggest, will be a poor compensation for having been born before the days of higher education and degenerate degrees. The Chancellor, the Vice-Chancellor, the Senate, individually and collectively, have repeatedly plumed themselves upon the high character of their pass examinations; they have, moreover, pledged themselves to maintain this character, and declared that any change by way of depreciation is impracticable and impossible. Let us hope that, under the pressure that will

be put upon them, we may not see "the impossible disguising itself as a fact, and going through the hollow mockery of taking place."

I am, Sirs, yours faithfully,
W. J. COLLINS, M.S., M.D., B.Sc.Lond.

Albert-terrace, Regent's-park, June 9th, 1889.

THE ASSOCIATION OF LONDON TEACHING INSTITUTIONS WITH THE UNIVERSITY OF LONDON.

To the Editors of THE LANCET.

SIRS,—I notice an error in your otherwise correct and valuable review of the proposals of the Royal Commission on a University for London, which it may be as well to correct. So far from rejecting the proposals of Sir Edward Fry for including institutions in the University which are not of university rank, the report expressly recommends and insists upon this (paragraph 12); and among "institutions of a less authoritative character" which are to be "co-ordinated" I find mentioned "the Birkbeck Institution, the City of London College," and others of the same type; while the provisions of the scheme put forward by Sir E. Fry's committee of Convocation of 1885 for arranging such institutions in groups and for deciding which group each was to belong to, are all virtually incorporated in the report (paragraph 23). It is true the counter report of the Senate Committee of 1888 is also incorporated in paragraph 23; but this counter report does not expressly reject Sir Edward Fry's plan, and the language of paragraph 12 of the report is conclusive as to the intentions of the Commissioners. I am, Sirs, yours truly,

A MEMBER OF THE ASSOCIATION FOR PROMOTING A TEACHING UNIVERSITY FOR LONDON.

June 18th, 1889.

*** Our correspondent is correct, and the difficulties of the scheme are thereby considerably increased.—ED. L.

SHORTHAND FOR MEDICAL STUDENTS.

To the Editors of THE LANCET.

SIRS,—Kindly permit me to announce that, with the sanction of Sir Dyce Duckworth, Mr. Howard Marsh, Dr. Gowers, and Dr. Coupland, the Oxford Shorthand Society will have much pleasure in offering a silver medal for competition among the gentlemen who present themselves at the October examination. It is proposed to limit this offer to beginners, but to impose no further restriction. My executive trust that the committee will decline to favour any particular system (such action being opposed to shorthand progress), but allow candidates to choose for themselves whatever system they may have evidence to believe best adapted to their requirements—easiest to learn, easiest to write, and easiest to read.

I am, Sirs, your obedient servant,
PERCY EDWARD KINGSFORD,
Hon. Sec. Oxford Shorthand Society; Member of Institute of Journalists; Shorthand Master at Dover College.

Dover, June 18th, 1889.

To the Editors of THE LANCET.

SIRS,—I see in your issue of the 15th inst. the subject of shorthand writing being prominently brought forth. Having practised the art (Pitman's) over forty years, I think I can safely claim to have some knowledge of it. I well remember my first difficulty on taking my place as a student at St. Bartholomew's in the lecture room, note-book in hand, vainly endeavouring to put down in ordinary writing the subject matter of the lecture. My knowledge of shorthand quickly relieved me of my difficulty, and I was soon able to take just as much as I felt would be useful. Again, when acting as clinical clerk I was able to keep pace with the doctor's remarks by the bedside of each patient. The latest use I am making of my knowledge is to put down my prescriptions in shorthand. Who, in general practice, has not felt the annoyance of a patient sending for a bottle of medicine "exactly like the last," also sending the bottle with a little in "so as to make sure of getting the right mixture," and no memorandum of the ingredients? In vain the bottle is held up to the light or a little of the contents tasted, &c., but all to no purpose. At last a venture is made with something as nearly as the memory will supply, to find the patient returning, with the remark, "It is not like the last; it does me no good."

I am, Sirs, yours truly,
Church, June 18th, 1889. J. DEARDEN, M.D.

THE TREATMENT OF HAY FEVER AND THE COCAINE HABIT.

To the Editors of THE LANCET.

SIRS,—Dr. De Havilland Hall, in his summary of the treatment now generally adopted in hay fever, has deprecated the continued use of cocaine. It has happened in my practice, and probably in that of others, that one has been called upon to advise and treat a patient who had already acquired the cocaine habit in seeking relief from coryza vaso-motoria, and the question naturally has arisen, Cannot the patient be induced to give up cocaine on our promising him an efficient and unobjectionable substitute? I think we possess in menthol an antiseptic remedy sufficiently resembling cocaine in its anæsthetic and astringent properties, and having none of its disadvantages. A Cornish patient of mine, who has been prevented coming for a reapplication of the galvano-cautery, which has hitherto relieved only for a season, has recently written to me to say that he would not be without menthol for worlds, and that he much prefers it to cocaine. I have no doubt others have had similar successes with a 10 or 20 per cent. of menthol, dissolved in almond or olive oil, and applied to the sensitive area of the nasal mucosa either by means of a brush or coarse spray. I remain, Sirs, yours, &c.,

WILLIAM HILL, B.Sc., M.B.Lond.

Wimpole-street, W., June, 1889.

THE TREATMENT OF DISEASES OF THE SPINAL COLUMN.

To the Editors of THE LANCET.

SIRS,—I am greatly indebted to Mr. Bernard Roth for expressing a wish that my letter on the subject of spinal curvature should have been clearer, the more so as I am entirely in accord with him in desiring distinctness. Mr. Roth, who might perhaps from the context have gathered my meaning, has preferred to deduce a seeming absurdity and to follow this through by asking me to reassert it and show authorities. If Mr. Roth was really confused, it behoves me to be more concise now, although I venture to doubt whether the profession is likely, as he seems to think, to be misled in distinguishing between caries and rotato-lateral curvature. Dr. Fleming, whose admirable paper led to this discussion, started by enunciating a fundamental general principle with respect to all spinal curvatures. He pointed out that right treatment consisted in removing pressure and improving nutrition, and that the removal of pressure was a mechanical problem. He proceeded to describe a very perfect mechanical appliance for the removal of pressure during recumbency, and finally gave some exemplary cases of carious curvature treated by this method, as well as a case of locomotor ataxy. What I was anxious to do in my last letter was to add my humble testimony to the results of Dr. Fleming's experience, and to concur to the fullest in his general fundamental principle. At the same time I said that the difficulties that surrounded the mechanical problem led to the periodic trial of new treatments. In making this last assertion I had especially in my mind rotato-lateral curvature. As I did not make myself clear on this point to Mr. Roth, let me do so now, and restate more succinctly that it has been my experience, with an even flow of cases of rotato-lateral curvature, that of those submitted to previous treatment the mass of them in the seventies had undergone the plaster-of-Paris treatment, and the mass of them in the eighties the gymnastic treatment. It has probably been Mr. Roth's personal energy, power of advocacy, and literary fertility that have led to the revival and prevalence of the gymnastic treatment in England lately; but, without going into any string of lengthy arguments, let me ask him this question: A fundamental principle of treatment being removal of pressure, and this being a mechanical problem, can the gymnastic treatment satisfy this principle, and in what way does it solve the mechanical problem? It was the fact that it does not do so that led to my expressing the opinion that it would, after full trial, die down as it did before;

while, for the reverse reason, the mechanical treatment would continue to hold the ground it has evenly done for more than a century.—I am, Sirs, yours truly,

Wimpole-street, June 17th, 1889. HEATHER BIGG.

STOURPORT MEDICAL AID ASSOCIATION.

To the Editors of THE LANCET.

SIRS,—In an annotation in your last issue you draw attention to a letter in the *Birmingham Daily Post* concerning the Stourport Medical Aid Association (a sufficiently uninteresting and illogical epistle in itself) and you then proceed to charge the medical officer of that Association with treating the rest of the profession with disrespect. Might I ask whom of the profession am I so treating? Not those at the top of the tree—hospital physicians and surgeons, who treat all hospital patients alike without regard to wage limit, not always with philanthropic motives, but to gain an education and a reputation at the expense of their fellows lower down the scale whose incomes are considerably lessened by hospital competition. Surely not the majority of general practitioners throughout the country, who are willing and ready to accept all clubs (Foresters, Oddfellows, Druids, &c.) and to attend them for 4*s.* per annum without regard to wage limit, and who often pay an assistant a meagre pittance to look after this part of their practice. And, finally, not the young and struggling practitioners, seventy and more of whom were ready to accept this appointment when I was elected. No one deplores more than I do the pass to which our profession has come; and there is seemingly worse in store for us. What plan or advice, then, have you to offer to men situated as I am? If you have none, until there be some means of escape from this underpaid system let us have your sympathy, not your blame.

I am, Sirs, yours faithfully,

June 18th, 1889. DONALD C. MARTIN, M.A., M.D.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Stanley Hospital.

THE bazaar and fancy fair on behalf of the Stanley Hospital was opened on Whit Monday by the Mayor of Liverpool, under most favourable auspices of fair weather, crowds of well-wishers, and most distinguished patronage. A sum of £6000 in all is required to pay off the debt on the hospital and to provide what is now admitted to be a necessary adjunct to every urban hospital, a horse ambulance. The first day's receipts exceeded £2000, and, with the exception of some slight showers on Friday, the weather throughout the whole week was most favourable. Though the exact sum realised cannot be known for some time, it is believed that the committee are satisfied with the result of the week's work.

Whit Monday Drinkers.

On the 11th inst. there were 183 persons charged with drunkenness in the public streets on Whit Monday, the penalty in each case being a small fine. This number shows an increase over those of past years. Among the prisoners were a large number of girls between the ages of fifteen and twenty, and the presiding magistrate commented upon the increase of inebriety among young women.

Cruelty to Children.

The Society for the Prevention of Cruelty to Children has done an excellent work in securing the punishment of many unnatural parents and others entrusted with the care of children, and at the same time deterring others from following such bad examples by the fear of similar penalties. Two recent cases which came before the Bootle magistrates show how much remains to be done, and what revolting cruelty might pass unheeded were it not for the intervention of kind-hearted neighbours and police officials. A married woman was charged with wilfully neglecting to provide nourishment for her infant child, a boy aged two years and five months. A police inspector found her in the street in a drunken condition, and persuaded her to go home. Subsequently he went to the house, and found in a miserably furnished room five children huddled together in a corner, with scarcely any clothing. They were all of tender age, and in a filthy condition. The husband of the prisoner gave her 28*s.* per week for herself and the children, but she spent it all in drink. Mr. Beaver, resident surgeon of the Bootle Hospital, found that the boy weighed only 15½ lb.—little more than half the average weight of a child of that age. The prisoner was sent to gaol for two months with hard labour. In another case a woman, who was a small shopkeeper, was charged with a similar offence, the child, who was fourteen months old, weighing only 11½ lb. The prisoner, who had always plenty of money for drink, was sent to gaol for three months with hard labour.

The Liverpool Workhouse Infirmary.

At the last meeting of the workhouse committee it was stated that there had been a great increase in the number of patients admitted into the infirmary of the workhouse. This increase is due to a certain extent to the increase in the number of admissions to the lock wards caused by the temporary closing of the Liverpool Lock Hospital.

Liverpool, June 19th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

University of Durham College of Medicine.

THE buildings of the College of Medicine are now fast approaching completion, and are expected to be ready for the meeting of the British Association in September next. Amongst the foremost candidates for the chair of Anatomy in the College were Dr. Yule Mackay, Demonstrator of Anatomy, University of Glasgow; Dr. Brooks of Trinity College, Dublin; Dr. Travis, late of Leeds School of Medicine; and Dr. Howden of Edinburgh University, who was elected to the chair in succession to Dr. Mears last Friday. The news of the death of Dr. Wooldridge of Guy's was received in Newcastle with deep regret. Dr. Wooldridge was the esteemed and much respected foreign examiner in physiology, and during his short service here he had gained the goodwill of the students. Dr. Wooldridge's death has caused a vacancy in the physiological department of examiners, which must soon be filled up, as the examinations for the degrees of the University of Durham are now close at hand. I hear that for the M.D. for practitioners of fifteen years' standing, there are ten candidates; for the M.D. thesis, eighteen; for the M.B., twenty-seven; while for the B.S. there are twenty-two.

Middlesbrough.

Dr. Malcolmson, the medical officer of health for Middlesbrough, in his report for May, remarks upon the lessened death-rate as compared with the corresponding period of last year, viz. 19 per 1000 against 37·60. This, he says, is entirely due to the fewer deaths from diseases of the respiratory organs. Last year the deaths from pneumonia up to this period were 75, and from bronchitis 20, while this year so far there have been only 14 deaths from pneumonia and 10 from bronchitis. The cremation question is still prominent in Middlesbrough. It will be remembered that about a month ago the Town Council decided to build a crematorium at a cost of £600, but owing to an outburst of public feeling of an adverse nature to the scheme, the Sanitary Committee decided to recommend the Council to rescind the resolution; this proposal, however, was rejected yesterday, and so the Council stand committed to proceed with the crematorium.

Darlington.

Miss Mary Eason, who died lately in London, and was a large property owner in Darlington, has left £10,000 to the National Lifeboat Institution, also large bequests for ecclesiastical purposes. The personalty of the will exceeds £113,000, and she has left the residue on trust for the benefit of the Middlesex Hospital.

Tyneside.

Dr. Wilson reported to the Local Board yesterday that the Wallsend district was at present suffering from a severe epidemic of measles. It is said that the committee of working men appointed to ascertain the wishes of the employers and the employés of the district as to the establishment of an infirmary at Wallsend have met with a large amount of support from the principal manufacturing firms, three of whom have promised £100 each towards the building, provided the project is taken up in an earnest way by the

working men. On the other hand, a writer in to-day's paper thinks that there is no need for a hospital for the district, seeing that patients can be taken by ambulance in a short time to Newcastle Infirmary and that Messrs. Atkinson and Philipson are building for his firm one of their well-known ambulance coaches. It is pretty well agreed now that small local hospitals are desirable for surgical injuries, while perhaps chronic cases, surgical and medical, are best adapted for large hospitals, where there is a large and efficient staff of medical men and nurses; so that when this is fully considered some practical compromise may spring out of the present movement. Gateshead is also asking for a surgical hospital. Hitherto it has been dependent upon Newcastle, but a town of 81,000 inhabitants should have this necessity for itself.

Newcastle-on-Tyne, June 19th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

EDINBURGH.

The Students' Union.

AT a meeting of the Acting Union Committee recently held, the following matters were considered—The members, the office-bearers, and the committee of management, the meetings, and the alteration of laws. The most interesting section for those both within and outside Edinburgh is that which deals with qualifications for, and conditions of, membership. As many old Edinburgh men may wish to join, either for convenience to themselves or to help the union, a short sketch of this section may not be without interest. The members are to come under one of five headings: 1. Ex-officio members: the Chancellor, the Rector, the Principal, the Presidents of the Students' Representative Council, the Trustees and the Treasurer of the Union. 2. Ordinary members: Matriculated students, members of the University Court, and members of the General Council. For ordinary membership there is an entrance fee of 5*s.* and an annual subscription of 10*s.* 6*d.*; for matriculated students and for others a fee of 1 guinea. The fee for ordinary life membership is 10 guineas. 3. Extraordinary members: University lecturers, assistants to professors, and University librarians shall be eligible for annual membership so long as the qualification lasts. The fees are the same as for graduates of the University. 4. Honorary members: the Chancellors, Rectors, Principals, and Presidents of the other Scottish Universities all for the time being. Ten honorary life members may also be elected who may be considered worthy of the distinction. 5. Occasional members: Ordinary members of the Unions of other Universities, temporarily resident in Edinburgh. This membership can only be used for two weeks at most at a time.

Shorthand for Medical Students.

A writer in one of the evening papers draws attention to Sir Dyce Duckworth's proposal, made in the General Medical Council, that intending students of medicine should pass an examination in shorthand. Of course it is assumed by most people that it would be another subject to be mastered before the student commences his medical studies, but the writer of the article referred to begs the whole question, and calculates that the subject would be added to the "medical" curriculum. This would certainly be a most injudicious addition; but as a preliminary subject there cannot be the slightest doubt that shorthand would, in the hands of any fairly intelligent lad, well repay a period of study extending over the last year or two of his school life. The professional stenographer who knows the amount of constant practice that is required to take a verbatim report of a complicated and much parenthesised speech, delivered at the rate of 150 to 190 words a minute, would of course view with contempt the efforts of a medical student who could write only at the rate of 60 or even 100 words per minute. But a student who can write at that speed can save himself one-third of his note-taking. He can listen to a lecture and can take it all in, and make a full abstract in shorthand at the same time, so that he gains a double share of the advantages to be derived from lectures. In case- and note-taking of all kinds an enormous amount of time is saved which may be utilised for other work, so that one or two of the sixteen hours' work of a medical student's day as calculated by the writer above mentioned may be saved altogether or devoted to other strictly professional work. We, in the north, are delighted that the matter has been so well taken up in the columns of THE LANCET, and by such thoroughly competent men, and we wish the movement all success, whether it again comes before the Medical Council or takes the form suggested by Dr. Gowers and others. It may be mentioned that Professor Grainger Stewart, Professor Chiene, Dr. Bramwell, and others, all utilise the skill of the phonographer in connexion with their lectures, &c.

Music for the Infirmary Patients.

A somewhat novel and interesting experiment is about to be tried in the Royal Infirmary. At the recent visit of the Earl of Hopetoun the band of the Edinburgh City Police played a selection of music in the infirmary grounds. The patients fully appreciated the music, and, it is said, experienced such beneficial effects that the convener of the Music Committee of the Town Council again granted the use of the band on a subsequent evening. The committee afterwards unanimously granted official permission to the band to play in the infirmary grounds every Wednesday afternoon from 3.30 to 5 o'clock. The doctors alone are not to have the credit af giving their services gratuitiously, as the members of the band have volunteered their services free. The public are to be admitted to the infirmary grounds between the hours mentioned. This is an experiment that deserves to succeed, and if the wards in which there are very sick patients are avoided, the results should be most satisfactory. In bright sunny weather cheerful music should have a great moral effect.

The Appointment of Dr. Howden to Newcastle.

It is announced this morning that Dr. Howden, the second assistant in the anatomical department of the University of Edinburgh, has been appointed to the Lectureship in Anatomy in the Newcastle School of Medicine. Dr. Howden is a very able lecturer, and is a great favourite with the hard-working Edinburgh student. The Newcastle School is to be congratulated on the wisdom of its choice, and the lecturers have adopted an ally who will certainly not make for a standstill policy.

Edinburgh, June 18th.

ABERDEEN.

Aberdeen University Court.

AT a meeting of the University Court last week it was agreed to accept the lectures on chemistry by Dr. J. T. Thompson, and on zoology by Mr. W. Newton Parker at University College, Cardiff, South Wales, as sufficient part of the course of teaching for medical degrees in Aberdeen, but it was made a condition that the lectures applied to a regular academic course, and not to classes held in the evening. A communication was also received from the Senatus, asking that sanction be given to the number of examiners in the Medical Faculty being increased from the present number of six to one for each subject of study (eleven). While sympathising with the request, the Court deferred dealing with it in view of the passing of the Universities Bill, the subject to be taken up in autumn should the Bill not be passed. It was pointed out that at present there were no funds to pay additional examiners, and the salaries (£30 each) of the present examiners could not be reduced.

The Volunteer Medical Staff Corps.

The Seventh Division V. M. S. Corps (the University Volunteer Bearer Company) held their first church parade on Sunday, the 9th inst. The company mustered nearly 100 strong, and the officers present were Surgeon MacGregor in command, Surgeons McKenzie, Booth, and Riddell, Quarter-Master de Lessert, and the Chaplain, the Rev. James Smith, M.A., B.D. Fifty of the company, including Surgeons MacGregor and Riddell, go to Aldershot from Aug. 3rd to 10th, to be drilled with the regulars.

Health of the City.

"Alarming spread of the Measles Epidemic" was the heading under which Dr. Hay's report for May appeared in the newspapers. The death-rate for the month shows an increase, being at the rate of 21·42 per 1000, as compared with 20·23 in April; and it is also the highest death-rate for any month of the year. The increased death-rate is

almost entirely due to an unusually large mortality among children under five years of age, the death-rate among them being at the rate of 62·73 per 1000, as compared with 38·7 for the first quarter of last year. The measles epidemic made very rapid progress during the month, nearly as many cases having been reported as in the whole of the previous course of the epidemic. From the commencement of the outbreak to the end of last month 1621 have been notified. There have been 39 deaths. For the first time since the introduction of notification, eight years ago, no case of scarlet fever had been reported in the course of a month. During last week there were reported 131 cases of measles, 1 of scarlet fever, 3 of typhus fever, and 1 case of whooping-cough. A case of small-pox was admitted into the City Hospital on Saturday. The patient, who is a domestic servant, recently returned from Algiers.

Aberdeen, June 18th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

DUBLIN.

Cork South Infirmary.

AT the monthly meeting of the trustees, held last week, Dr. H. R. Townsend was elected on the intern surgical staff of the hospital. Dr. Townsend is a dispensary medical officer, and as Rule 1 of the infirmary enacts that no one be selected for the intern staff who holds any appointment calculated to interfere with his efficiency in that institution, such as the post of dispensary physician &c., it was proposed and carried unanimously that the words "except in special cases" be added. This was done, and the appointment was then made.

Cork Workhouse.

The half-yearly report of Colonel Spaight, Local Government Board Inspector, on the condition of this institution, was presented to the Board of Guardians last week, and will be considered at a future meeting. He states that the drainage is not in a proper condition at present, but several alterations are in progress and others suggested, which it is hoped will remedy all defects. As regards the overcrowding which exists, he finds that there is a great want of room, particularly on the male side of the workhouse, so much so that it is becoming intolerable. In the male lunatic wards there are fifty-three inmates and room for thirty only. It appears also that a number of beds are piled during the day in the dormitory, and laid on the floor of the day-room at night; while the infirm class are overcrowded, and mixed up with the able-bodied. The male hospital also is crowded—in fact, the whole of the male side of the workhouse, while there is comparatively abundance of room on the female side. To remedy this condition of affairs, the inspector suggests that the late Lock Hospital should be acquired by the guardians, and that they should remove there the large class at present in the separation wards.

Cork District Lunatic Asylum.

About fifty of the inmates of this asylum had a narrow escape on Saturday last from being asphyxiated. While in the Turkish bath the attendant discovered that the apartment was becoming filled with the fumes of coke from the adjoining heating room, with the result that they were gradually being suffocated. About twenty of the patients fell down insensible; but assistance having been obtained, all were removed and restored to consciousness. An official report in reference to the circumstance has been prepared by the resident medical superintendent, and will be brought under the notice of the governors.

Dublin, June 18th.

BELFAST.

The Railway Accident at Armagh.

ON Wednesday, June 12th, one of the most terrible railway accidents which has ever occurred in the United Kingdom, and undoubtedly the most fatal one which has happened in Ireland, took place in the neighbourhood of Armagh. It would appear that a train, consisting of an engine and tender, thirteen carriages, and two vans, one in front and one behind, laden with a freight of 941 passengers, the greater number of whom were Sunday-school children, who were going on an excursion to Warrenpoint (a favourite north of Ireland watering-place), left Armagh at 10.15 A.M. on the Wednesday morning, being about a quarter of an hour later in starting than the appointed time. The line starting from Armagh is horizontal for a short distance, and then there is a rising gradient of 1 in 82 for fifty-four chains long, and then 1 in 75 for a little over two miles. Then at the top of the gradient comes a place called Dobbin's Bridge, between two and three miles from Armagh. When the train reached a spot on this rising gradient eight or ten perches from Dobbin's Bridge, it came to a standstill, from, as far as can be learned, the circumstance that one engine was quite inadequate to take the heavily laden train up the steep gradient. The train was either uncoupled in the middle or the coupling chains broke and the back carriages started down the line, their velocity, owing to the declivity, rapidly increasing, and, at about three-quarters of a mile from the commencement of the gradient, they rushed into the ordinary passenger train, which had left Armagh at 10.35 A.M. Here a most frightful collision occurred, although the engine driver of the passenger train had almost succeeded in stopping his train. As a result seventy-six deaths have occurred, and an immense number have been injured. After the accident the medical men from Armagh were at once on the scene, and the wounded were nearly all taken to the County Infirmary. Here Mr. Mansergh Palmer has had a very anxious and busy time, and everyone is praising the great ability and generalship which he displayed under very trying circumstances. About 1 o'clock in the day the railway company telegraphed for all the available doctors from the Royal Hospital to proceed to Armagh; the house-surgeon, resident pupils, and several doctors at once left, but when they reached the city they found all the wounded had been taken to the infirmary. The medical men from Portadown and Lurgan were also summoned. Mr. J. Fagan was sent by the railway company as their consulting surgeon.

Belfast, June 18th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Lactose as a Diuretic.

PROFESSOR GERMAIN SÉE has made a long communication to the Academy of Medicine on the employment of lactose in the treatment of diseases of the heart, the conclusions of which may be summarised as follows: Lactose constitutes the most powerful diuretic, and, at the same time, the most inoffensive. It is lactose alone which gives to milk its diuretic property. The other principles of milk, particularly the water and the salts, have no manifest or useful action; the chloride of sodium adds nothing to the polyuria due to the sugar of milk, and the salts of potash themselves play only a very limited part. Milk, taken in doses of two litres, produces diuresis; but in doses of four litres, each of which contains fifty grammes of lactose, it determines also a very pronounced glycosuria, a transitory diabetes, a portion of 200 grammes of sugar thus absorbed being eliminated by the urine. There is likewise a considerable excretion of urea, indicating a destruction of the albuminates. There is, then, at the same time, glycosuria and azoturia. The use of sugar of milk obviates these inconveniences and dangers; 100 grammes of lactose in a mixture produce an enormous diuresis, which may not be obtained with four or five litres of milk. With lactose there is neither glycosuria nor azoturia. In milk the action of lactose is impeded by the caseine and fat. Lactose acts with certainty in dropsies of cardiac origin, but in a doubtful manner, or even has no action, in dropsies of renal origin. In affections of the heart it fails only when the kidney becomes granular, and when the albumen rises to sixty centigrammes or to one gramme per litre. So long as the albumen remains in this minimum proportion the result is favourable. Lactose is, in general, well supported, whereas milk is not always acceptable to patients. Lactose has another great advantage over milk in permitting patients to take all kinds of nourishment, as it does not overload the stomach as milk does. Professor Sée considers that we have, in lactose, *the* diuretic of affections of the heart at the asystolic period, and the true curative means of dropsies of cardiac origin, even those which have resisted all other polyuric agents; but it is powerless to relieve the dyspnœa resulting from heart disease. It should, there-

fore be seconded by the iodide of potassium, the remedy *par excellence* for this complication.

Endometritis.

In a paper by Dr. Dumontpallier, the author remarked that endometritis is by far the most frequent affection which presents itself at the gynæcological clinic at the Hôtel Dieu, for which he proposes a new treatment by the introduction of pencils of the chloride of zinc directly into the uterine cavity. Dr. Dumontpallier found that the caustics hitherto employed were of little efficacy, and even dangerous; whereas he considers this new procedure as being certain and safe. Of 100 cases, he had 96 cures without complications, and 4 cures after complications due to imprudence committed by the patients. The ingenious part of this method consists in employing caustic pencils of very great suppleness, which can adapt themselves to the different directions of the uterine cavity. The eschar produced by the caustic is expelled about five days after its application. Vaginal asepsis is rigorously practised before and after the application of the caustic. This is effected with a solution of carbolic acid or the liquor of Van Swieten (a mercurial solution). In hæmorrhagic endometritis, whatever its age or gravity, the hæmorrhage is arrested soon after the introduction of the caustic. In the muco-purulent and pyo-hæmorrhagic forms the discharge is at once stopped. The cure is complete in two days after the expulsion of the eschar, there having been no stricture or contraction of the uterine cavity, and menstruation having been normally established in a very short time.

Suspensory Treatment of Ataxy.

At the meeting of the Academy of Sciences of last week, Professor Charcot protested against the false reports of a number of deaths resulting from the treatment by suspension of ataxic subjects. Professor Charcot found on inquiry that the three deaths that were cited in a recent report were caused by imprudence on the part of the patients, who, by some mismanagement, hanged themselves. In Germany, said the learned Professor, there have been already 957 suspensions practised, which have produced good results; in France there have been more than 300. The statistics may therefore be considered favourable to this method of treatment.

Pasteur and Rabies.

M. Pasteur has transmitted to the Academy of Sciences a statement of the number of persons treated at the Institute from May 1st, 1888, to May 1st, 1889. There were inoculated 1673 persons bitten and suspected to be affected with rabies, among whom there were 186 foreigners and 1487 French. Ten subjects bitten in the face and hands died during the treatment; three died after the treatment. Strictly speaking, the proportion of deaths, notwithstanding the treatment, is therefore 3 per 1673, or 1 in 554 persons treated. In other words, the proportion of deaths being 13, there would be 1 death per 128 persons treated or under treatment. These figures, which are not accompanied by any comments from M. Pasteur, are evidently in favour of preventive inoculations.

Suicidal Mania.

A case of suicidal mania was lately exemplified in the person of a man named Favre, aged fifty. His body was one morning found hanging at the corner of the Boulevard des Italiens and the Rue Richelieu. A doctor who was immediately called certified that death had taken place several hours. This is the fourth time that Favre had attempted to put an end to his life. The first time he opened his veins with a razor; on the second occasion he threw himself into the Seine; he afterwards tried to asphyxiate himself with the fumes of charcoal. Each time he was saved in spite of himself.

Paris, June 18th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Eduard von Homeyer.

THE naturalist, Eduard von Homeyer, who died at Stolp lately, aged almost eighty, was one of the most prominent ornithologists in Germany. He was an agriculturist, and occupied himself with ornithological observations, at first as a pastime only, but afterwards, and especially in the latter years of his life, he devoted himself entirely to scientific ornithological studies. His first observations were made on the birds of his native Pomerania, and he published the results about fifty years ago. His chief work is "The Wanderings of the Birds." In 1884 he, together with Hazek and other naturalists, undertook to compile an exhaustive work on the various species of birds. He was a most zealous collector, and his collection of birds is reputed to be the largest in the world.

Theodor Schwann.

A memorial tablet has lately been affixed to the house at Neuss, in Rhenish Prussia, in which Theodor Schwann, the originator of the cell theory, was born. His father was a bookseller there, and a devout Roman Catholic. The naturalist himself was also characterised by religious zeal. Before publishing his epoch-making work on the cell, he wrote to the Archbishop of Malines, to whose diocese his native place belonged, stating his new theory, and begging his opinion whether it was at variance with the doctrines of the Catholic Church. The prelate found nothing heretical in it. It was published in Berlin in 1839, under the title, "Microscopic Investigations regarding the Harmony in the Structure and Growth of Animals and Plants." Schwann was at that time assistant in the Berlin Anatomical Museum.

New Publications.

Among the most recent German publications in the field of medicine and the cognate sciences may be specified the following:—"The Seventh Annual Report of the German Samaritan Society in Kiel"; "Introduction to the Use of the so-called Schweninger Cure and of Cognate Dietetic Cures," and "Misconduct, Mistakes, and Dangers in the use of Modern Cures for Corpulence," by Dr. Carl Zahn; Nos. 9–12 of Dr. Bock's "Book on the Human Body in Health and in Sickness," edited by Dr. Max von Zimmermann; "A Catalogue of the Books &c. on Veterinary Science published by Enslin in Berlin"; and six new numbers of "Generally Intelligible Essays on Natural Science."

Sending Poor Sick Children to the Country.

The seventy-five advising physicians of the Committee for sending Children to the Country appointed by the Society for Domestic Hygiene have nominated 4000 Berlin children as urgently needing to be sent to some watering-place or other health resort. Many of these children are suffering from scrofula. During the eight years that have elapsed since the Society, at the suggestion of its patroness, the Empress Victoria, began this work, the number of poor sick children that it has sent to healing waters and healing air has increased eighteenfold. Thanks to the efforts of Dr. Becker the managers of the Admiralsgartenbad (Admiral's Garden Bath) in Berlin have kindly placed their new brine baths at the disposal of the above-mentioned committee. Sixty scrofulous children are to bathe there alternately under medical superintendence, and will then be sent under the care of a teacher to some place in the country near Berlin. A generous person (who wishes to remain anonymous), deeply moved by a painful misfortune which had overtaken a rich relative, has given the committee 5000 marks (about £250) for immediate use. This gift secures to about 100 children the benefit of a summer in the country.

Surgeons-General von Bergmann, von Esmarch, and Abel.

Professor von Bergmann, who was till lately Surgeon-General *à la suite* of the Bavarian Ambulance Corps, has left the Bavarian army, and has been appointed Surgeon-General *à la suite* of the Ambulance Corps in the Prussian army, with the rank of Major-General. The same rank has been accorded to Surgeons-General von Esmarch (of Kiel) and Abel.

Freiherr Jaromir von Mundy.

An anonymous biography of the well-known Austrian physician, Freiherr Jaromir von Mundy, has been published at Leipsic. From very early years Mundy had a strong predilection for the study of medicine, but the wish of his aristocratically-minded father induced him to adopt the military profession, and it was not till he had attained the rank of captain that he left the Austrian army and studied the art of healing at Würzburg and other famous universities. The war between Austria on the one hand and France and Italy on the other recalled him to his old profession of arms, but after that he never

trod a battle-field again except as a surgeon. The book records what Mundy did in the province of mental therapeutics, and the great debt which military medicine and the ambulance service owe him. It contains illustrations representing the ambulance waggons, litters, and other vehicles for the sick and wounded invented by him.

Professor Karl Ludwig.

Professor Karl Ludwig of Leipsic, who lately received the high distinction of the Order *pour la merite*, is one of the most eminent physiologists living. He is the chief authority on the pressure and motion of the blood, and shares with Du Bois-Reymond, Brücke, and Helmholtz the glory of having freed physiology from the theory of vital force, and of having founded the physico-chemical method.

Military Hospitals.

The international jury appointed to judge in the competition suggested by the Empress Augusta, as to the best internal arrangement of a movable military hospital, met for the first time on the 13th inst. in the hall of the Central Committee of the German Red Cross Societies. The jury consists of Dr. von Cessner and Dr. Loew for Austria; Dr. von Fartas for Hungary; General Müller for Russia; Mr. John Furley for England; M. Sigart for Belgium; Baron Hardenbrook for Holland; General von Thomson for Denmark; and Drs. von Coler, Mehlhansen, Gurlt, von Bergmann, and Nieden for Germany. The French, Swedish, and Italian members were prevented from being present by urgent business. The sum of 10,000 marks and three gold and nine silver medals are placed at the disposal of the jury.

A New German Pharmacopœia.

The sub-committee of the Pharmacopœia Committee met on the 12th inst. and following days under the presidency of Privy Counsellor Köhler, Director of the Imperial Office of Health. It is said that a new edition of the Pharmacopœia is to be published in German.

The Medical Superintendence of Schools.

The Scientific Deputation for Medical Affairs has made the following proposals to Dr. von Gossler, Prussian Minister of Education:—"1. The buildings &c. in and around each school to be periodically inspected by the school physician, who shall answer a printed list of questions in writing, and then send it to the authority under which the school is placed. Every school is to be inspected in this manner at least every three to five years. 2. In order to ascertain the state of the pupils' health, each school to be inspected by a physician soon after the beginning of each school year. Each child entering the school for the first time to be examined, and any defects that he or she may have to be ascertained; as regards the other children, this is not necessary in all cases. The steps to be taken for the removal of defects and drawbacks to be determined in conference with the teachers. 3. In order to secure the success of the medical examination and suggestions, the superintending authority to inform the physician of what has been done as regards point 1, and the head master or head mistress as regards point 2; and the physician to be empowered to make complaints to the higher authority. In the case of children suffering from infectious diseases, the sanitary police regulations to be enforced. 4. The competent administrative State authorities to determine what schools are to be subjected to such medical superintendence, what physicians are to be employed, and under what conditions. Special school physicians are necessary in separate institutions with boarders and in large cities."

Professor Wilhelm Schütz, one of the discoverers of the glanders germ, has been appointed Rector of the Berlin Veterinary College.

Dr. Ferdinand Hueppe of Wiesbaden has been appointed Professor of Hygiene at Prague. He is the sixth of Robert Koch's pupils who has been appointed to a professorship. The other five are Gaffky of Giessen, Wolffhuegel of Göttingen, Loeffler of Greifswald, Gaertner of Jena, and Bernhard Fischer of Kiel.

Owing to the strike in the building trade, the new Berlin Hospital am Urban will not be ready before January.

The health of Berlin during the recent abnormal heat was excellent, better in every respect than that of other capitals. There was a surprising absence of cholera nostras.

Dr. Carl Pelmann, head physician in the Provincial Lunatic Asylum at Bonn, has been appointed professor there.

Wissmann's expedition is furnished with 1600 portions of vaccine lymph from the establishment of Dr. Protze, in Elberfeld, who has for many years supplied the German troops with lymph.

Professor Du Bois-Reymond has been elected Corresponding Member by the Swedish Academy of Sciences.

The labours of the jury appointed to award a prize for the best plan for workmen's baths are in full progress. Professor Robert Koch, director of the Hygiene Institute here, has taken a keen interest in the matter.

The well-known chemist, Professor August Wilhelm von Hofmann, who was for twenty years professor of the Royal College of Chemistry in London, has been appointed Corresponding Member by the Vienna Academy of Sciences.

Berlin, June 15th.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

A FAIRLY attended general meeting of the members of this Association was held at 4.30 P.M. last Thursday, at the Medical Society's Rooms, Chandos-street, W., the President, Mr. George D. Pollock, in the chair. After the usual formal business was concluded, and the Committee of Management formed, with the addition of Messrs. Rivington, Pierce Gould, and Dr. Collins, in place of three outgoing members of the Committee, the President read a letter from Mr. Lawson Tait regretting his inability to attend, and placing himself entirely in the hands of the Committee as regarded his candidature to the Council of the College. Mr. Holmes, the Vice-President, then urged that the Association should support the candidature to the Council of Messrs. Rivington, Lawson Tait, and Tweedy, that being the number of votes at their disposal, and not waste their strength in voting for those whose chances were remote. He then moved a resolution, which was seconded by Mr. Richard Davy, and, after some discussion, carried, that their Association undertake to support the three gentlemen in question. At a later stage of the proceedings the wording of the resolution was changed into the following:—"That a circular be issued at once to all the electors, inviting them to vote for Messrs. Rivington, Lawson Tait, and Tweedy, the candidates adopted by the Association of the F.R.C.S., and setting forth the objects for which the Association contends." It was then agreed that a committee should be formed consisting of the President and Vice-President, with the assistance of Mr. Allingham as Secretary, to draw up the terms of the circular, Mr. Tweedy rendering outside assistance when and if necessary. A copy of this circular is subjoined.

During the proceedings Mr. Tweedy spoke at some length, and said one of the objects of the Association was to obtain for the Fellows and Members a larger share in the management of the College. With regard to the bye-laws and the charges made that they had been violated, it was absurd to say that bye-laws were made to exist for ever. They were justified in attempting to have bad bye-laws altered. Referring to the Court of Examiners, he thought it met the justice of the case if only one half of them were allowed a seat on the Council. He then described how the compromise or *modus vivendi* between their Association and that of the Members had been arrived at, and expressed his satisfaction at the result. It was desirable, Mr. Tweedy thought, that the Members should be represented on the Council, which would be strengthened thereby, and he felt convinced that the Council would have to yield and accept a sensible compromise.

Mr. Holmes also expressed the opinion that the Council required an infusion of new blood, and that was why he favoured the candidature of Messrs. Rivington, Tait, and Tweedy, who were pledged to reform. The object of their Association was to extend the privileges of the Fellows and obtain some share of the management of the College for the Members.

Mr. Macnamara denounced the Draft Bill as an unfortunate document, doing great harm by causing a widespread impression that the Association wished to do away with the Council. What they wanted, however, was re

form, and not abolition. He therefore urged unremitting effort to achieve this much-desired reform of the Council. The Draft Bill was also condemned by the President and other speakers.

COPY OF CIRCULAR.

"In accordance with this resolution [mentioned above] we beg to remind you that the Association of Fellows was established on June 12th, 1884, primarily to carry out the following objects:—1. That Fellows and Members should enjoy a larger share in the management of the College. 2. That there should be an annual meeting of Fellows and Members, at which the report of the Council should be presented, discussed, and (if approved) adopted. 3. That no alteration should be made in the constitution or in the relations of the College or in any of its bye-laws without the consent of the Fellows and Members convened to discuss the same. 4. That the President of the College be elected by the Fellows. Subsequently the Association suggested to the Council certain recommendations with respect to the alterations to be made in the Charter. One of these was that not more than one half of the members of the Court of Examiners should have seats on the Council. In the meantime an Association of Members had arisen with objects in some respects antagonistic to those of our Association; but ultimately an agreement was arrived at on the following bases—viz., that Members of the College of ten years' standing should vote at the election of members of the Council, and that Members of twenty years' standing should be eligible to sit in the Council, provided that the number of members of Council so elected—i.e., by the Members—shall not exceed one-fourth of the whole Council. Some misapprehension having prevailed with respect to the position of the Association of Fellows towards a Draft Bill which has been prepared for introduction into Parliament, it is but right to say that the Association, as such, has never formally considered this Draft, and is in no degree pledged to any proposition inconsistent with the resolution stated above. The objects of this Association remain what they have always been—'to promote the professional and social, as well as the political, interests of the Fellows.' Thus in February, 1886, we resisted a proposal tending to lower the academic status of the Fellowship, and are equally ready to resist anything likely to curtail the privileges of the Fellows.

"Signed on behalf of the Association of Fellows,

"GEORGE POLLOCK, President.

"June 20th, 1889." "T. HOLMES, Vice-President.

Obituary.

LEONARD CHARLES WOOLDRIDGE, M.D., D.Sc.

THOSE who were present at the Royal College of Physicians on the afternoon of Thursday, June 6th, to listen to the Croonian Lecture given by Dr. Lauder Brunton, were shocked to hear him say that, two hours and a half before he began his lecture, there had suddenly passed away from among us Dr. Leonard Charles Wooldridge, probably the most talented physician of his standing. The sad news quickly spread; all who heard it were awed and could hardly realise it, for Dr. Wooldridge was young and usually in good health, and he was a man whose enthusiastic devotion to the science of medicine was accompanied by such industry and rare genius that the profession had learnt to look to him as one who would throw a flood of light upon many of the obscurities of medicine.

He was born at Overton, in Hampshire, on Dec. 16th, 1857. His grandfather, Charles Wooldridge, was a flourishing solicitor in Winchester, and his father, Leonard Wooldridge, M.R.C.S. Eng., L.S.A., studied medicine at Guy's Hospital, and did a large county practice at Overton, where he died in his sixty-eighth year. Leonard Charles was educated at the Surrey County School, Cranleigh. When he was thirteen years old he came alone to London in the holidays and passed the entrance examination at the Apothecaries' Hall. Shortly after this he lost his father. He matriculated at the University of London straight from Cranleigh School in June, 1874. He then entered at Guy's Hospital for the preliminary scientific classes, and was quickly marked out from his fellow students by his great ability and his marvellous power of working; not only could he work for a long while at a stretch, but he got through an immense amount. As the Preliminary Scientific Examination came near he would sometimes sit up all night to read. At the examination he obtained the Neil Arnott Exhibition and gold medal for Experimental Physics, an honour which had never before been awarded; he was also placed in the honours list for Botany. In October, 1875, he entered as a perpetual student at Guy's Hospital, gaining the Entrance Exhibition. To the surprise of all his friends, he took German as a voluntary subject, although he had only been working at it for a few weeks. In July, 1876, he gained the first prize of £50 for students in their first year, and in May, 1877, he won the Sands Cox Scholarship, which is awarded at Guy's for Physiology. In July, 1877, he passed his Intermediate M.B. Examination at London; he was third in honours in both Physiology and Chemistry, and was deserving of the medal in Materia Medica. In October, 1877, he took his B.Sc. degree. In July, 1878, he obtained a prize at Guy's which is awarded to students in their third year. During the years 1877, 1878, and 1879 he held the usual student's appointments at Guy's Hospital; he was dresser to the late Mr. Cooper Forster, who always had the greatest regard for him, an affection which was fully reciprocated by Wooldridge. In 1879 he took his M.R.C.S., and in this year, acting upon Dr. Pye-Smith's advice, he went to Leipsic to study. Except that he paid a short visit to England in 1881 to take the degree of D.Sc. in Physiology at London, he remained at Leipsic till the summer of 1882, when he returned to England to prepare for his final M.B. examination, which he passed in November of that year, obtaining the gold medal in Medicine and first-class honours in Forensic Medicine. He took his M.D. degree in 1886. In 1881 Professor Michael Foster offered him the George Henry Lewes Travelling Scholarship, which he accepted, but he held it only for two years, as he wanted to marry and to live in London. In the winter of 1883 he went to Berlin, and worked at pathology under Virchow. In 1884 he married the eldest daughter of Sir Edward Sieveking, by whom he leaves one daughter, aged two years and a half. In this year also he was appointed Demonstrator of Histology and Practical Physiology at Guy's Hospital, and also to the Research Scholarship of the Worshipful Company of Grocers, which is worth £250 a year. This he held for three years, and during his tenure of the office gave some lectures on the Coagulation of the Blood. When it had expired, he was, on the strong recommendation of Sir John Simon, reappointed for another three years, and was therefore holding the post when he died. In 1885 he became a Member of the Royal College of Physicians; but before this he had been appointed an Examiner in Physiology on the Conjoint Board, chiefly through the late Dr. Moxon's advocacy of his claims, and quite recently he was appointed Examiner in Physiology at Durham University. In 1885 and 1886 he gave the Arris and Gale Lectures, which were afterwards printed under the title of "Blood Plasma as Protoplasm." In 1886 he gave the Croonian Lecture before the Royal Society. In 1887 he was appointed assistant physician to Guy's Hospital, and joint lecturer on Physiology and demonstrator to the advanced classes in that subject. Also in this year he was selected by Dr. Buchanan to do work for the Local Government Board.

On Wednesday, May 29th, Dr. Wooldridge saw his outpatients as usual, and afterwards went to get something to eat at a restaurant. He had some anchovies. Two hours afterwards he was seized with giddiness and faintness, and in the night with severe diarrhœa. All this he attributed to the anchovy sandwich he had eaten. A full account of his strange illness, which ended in his sudden death on June 6th, was given in our issue of last week.

A necropsy the next day by Dr. Newton Pitt revealed congestion of the stomach and duodenum, many small recent follicular ulcers in the colon, and a dilated heart, but there was no valvular mischief. It would therefore appear that the morbid state of the stomach and colon produced in his exhausted condition a cardiac dilatation, which proved fatal from syncope. He was always pale, and did not often look thoroughly well; but nevertheless his power of work and endurance were extraordinary, for often after a hard day's work he would spend all the evening at the Brown Institution making experiments, and then he would work far into the night preparing his lectures for the next day.

He was devoted to experimental medicine, and often used

to regret that so little attention was paid to it in this country. Some of his most laborious and best work was connected with the coagulation of the blood, and one of the most notable papers appeared in Ludwig's "Festschrift." It was entitled "Uebersicht einer Theorie der Blutgerinnung," and he gave a lecture at the University of London on the same subject. His first paper was published when he was twenty-one years old. It was entitled "Zur Chemie der Blutkörpchen." His last paper appeared in the Proceedings of the Royal Society for January, 1889; it was on "Auto-infection in Cardiac Disease." The Croonian Lectures which he delivered were on "Intra-vascular Clotting." He found that a remarkable intoxicant proteid could be prepared from the thymus or testicle, and that when this was injected into the veins it produced widespread clotting in the vessels (Proceedings, Royal Society, 1886). By means of the same material he was able to produce hæmorrhagic infarction of the liver (Pathological Transactions, vol. xxxix.), and he thought that many of the pathological changes in the liver could be explained by supposing that a similar proteid method was developed in the course of certain diseases. He hoped that some day this material might be used to cause coagulation in aneurysms. Another important fact he discovered was that in the substance in which anthrax bacillus is cultivated a fluid is developed which has the power of killing the bacillus. He translated Heidenhain's book on Hypnotism. He published a large number of papers in various journals, especially Du Bois-Reymond's Archives, the Proceedings of the Royal Society, and the *Journal of Physiology*. One of the most valuable of these was entitled "Ueber Schützimpfung auf chemischen Wege." All these papers showed that his views were widely different from those usually held. He did not agree with the generally received theory of coagulation, and looked upon the blood plasma as living protoplasm. He thought that far too much importance was attached to the cell by modern pathologists; and the common explanation of the symptoms—such as œdema—of heart disease he regarded as erroneous. His work was so voluminous, far-reaching, and intricate, that want of space forbids any criticism of it here, nor would it be possible even if we could devote the space, for researches so carefully thought out, so thoroughly and laboriously executed, and in which fallacies are so skilfully avoided, will require many years of careful thought and work on the part of physiologists and pathologists before their worth can be appreciated. But even if the theories of the future should not quite harmonise with all Wooldridge's work, he will always remain remarkable as being one of the most enthusiastic, original, and able devotees to the science of medicine, and as being a man who above everything sought the truth for truth's sake; no desire for any of the temporal benefits of this life ever caused him to deviate even by a hair's breadth from his search for the truth. The highest compliment which could be paid to a scientific man was paid to Wooldridge after his Arris and Gale Lectures by Sir James Paget, who said, "His work is quite Hunterian." This same unswerving thoroughness showed itself in his lectures on Physiology, which were all most carefully prepared before delivery till he could give them almost extempore; and also in his clinical teaching, for he always, in discussing the pathology of any case, went to the root of the matter with such earnestness that the students felt they had a fresh grasp of their subject, and for the same reason they enjoyed listening to his clinical lectures. These characteristics that made him a great man in the scientific world also caused him to be loved by his fellow students and by those who studied under him. He had no enemies, but hosts of friends and admirers, and those who were incapable of appreciating the high quality of his scientific work loved and respected him as a man. The whole world is a loser by his death, for men such as Wooldridge are rare, and had he lived medicine would have advanced during the next few years by greater strides than it will now he has been called away.

The funeral took place on Wednesday, June 12th. The hearse started from the quadrangle at Guy's Hospital at 1.30 P.M. The interment took place at Norwood Cemetery at 3 P.M.

So many of his contributions are to be found only in foreign journals that the following list of his publications may be useful:—1. Uebersicht einer Theorie der Blutgerinnung (Ludwig's Festschrift, Leipsic, 1887). 2. Zur Chemie der Blutkörpchen (Du Bois-Reymond's Archiv, 1881). 3. Zur Gerinnung des Blutes (Idem, 1883). 4. Ueber einen neuen Stoff des Blutplasmas (Idem, 1884). 5. Beiträge zur Frage der Gerinnung (Idem, 1884). 6. Ueber Schutzimfung auf chemischen Wege (Idem, 1888). 7. On the Origin of the Fibrin Ferment (Proc. Roy. Soc., 1884). 8. On a New Constituent of the Blood and its Physiological Import (Idem, 1884). 9. On the Fibrin-yielding Constituents of Blood Plasma (Idem, 1885). 10. On the Coagulation of the Blood: Croonian Lecture (Idem, 1886). 11. On Intravascular Clotting (Idem, 1886). 12. Note on a New Constituent of Blood Serum (Idem, 1887). 13. Note on Protection in Anthrax (Idem, 1887). 14. Auto-infection in Cardiac Disease (Idem, 1889). 15. Ueber die Function der Kammernerven des Säugethierherzens (Archiv f. Anat. und Physiolog., 1884). 16. Ueber Intravasculäre Gerinnungen (Idem). 17. Beiträge zur Lehre von Gerinnung (Idem, 1888). 18. On the Coagulation of the Blood (Journal of Physiology, vol. iv., No. 6). 19. Further Observations on the Coagulation of the Blood (Idem, vol. iv., No. 2). 20. The Action of Pathogenic Organisms (Local Gov. Board Rep., App. B., No. 3). 21. Chemical Protection (Idem, 1887). 22. Zur Frage der Blutgerinnung (Zeitschrift für Biol., 1888). 23. On Hæmorrhagic Infarction of the Liver (Path. Trans., 1887). 24. The Red Blood-corpuscles and Coagulation (Practitioner, 1886). 25. Blood Plasma as Protoplasm (Arris and Gale Lectures, 1886).

G. OWEN REES, M.D.GLAS., F.R.C.P.LOND., F.R.S.

DR. REES, whose death we very briefly recorded in our issue of the 1st inst., was born at Smyrna in November, 1813. His father, a Welshman, was a Levantine merchant, and married an Italian. Young Rees was brought to London early in his boyhood, and sent to school in the metropolis. When he decided to adopt the profession of medicine as his vocation in life, he went to Guy's Hospital, and afterwards to Paris and Glasgow. In April, 1837, he graduated M.D. of the University of the last-named city, and at once returned to London and began to practise as a physician. He first lived in Guilford-street, Russell-square. When, however, his practice increased, he moved westwards, and resided for some years in Cork-street, and afterwards at 26, Albemarle-street. Dr. Rees' practice was of the kind which is often called "fashionable"; that is to say, he numbered amongst those who consulted him a considerable proportion of persons holding an exceptionally good social position. Amongst the most intimate of his personal friends was the late Sir Benjamin Brodie. In those cases which came under the latter surgeon's observation, and required for their elucidation a careful examination of the urine, Dr. Rees was often entrusted by his friend with that part of the work. It was to Sir Benjamin Brodie's influence that he owed one of his first appointments of professional importance in London—namely, that of medical officer to Pentonville Prison, the first appointment of the kind made to this prison. Another of Dr. Rees' intimate friends was Dr. Roget, F.R.S., the well-known author of the "Thesaurus of English Words and Phrases" and foreign secretary to the Royal Society. Dr. Rees was urged to bring some of his scientific work before the Royal Society, and Dr. Roget took a particular interest in him and his work, especially that portion of it which dealt with the subject of the nature of the blood-corpuscles and their shape. It was for that important piece of original investigation that Dr. Rees received the Fellowship of the Royal Society.

The late Mr. Rees, who was a partner in the well-known firm of Longmans, the publishers, was uncle to Dr. Rees, and it was probably at this uncle's table that, early in his career, he acquired that love for dining in pleasant company which was one of the characteristics of the social side of his life. He was witty and able as a conversationalist, and as an after-dinner speaker he was often excellent. Of French, German, and Italian he had a fair knowledge, and his conversation showed that he read much in all these languages. In politics he was a decided but temperate Liberal, and always carefully distinguished between the clap-trap of party cries, and the real good which, in his opinion, was likely to flow from well-considered reform of public and private interests touching the well-being of the people.

Dr. Rees will probably always be known in the story of medical history as one of the first men who turned attention to the chemistry of the urine. His example was followed by many who came after him in professional life and work. Thus we owe something of the great advance which has recently been made in the chemistry of the urine to his work and example.

Six years after taking his M.D. degree at Glasgow, Dr. Rees was appointed (1843) assistant physician to Guy's Hospital. After thirty years' service on the staff there, he retired from the acting staff, and became consulting physician to the hospital. One of the most distinguished and honoured of his colleagues testified to his merits as a teacher in these words: "We might add that no officer of the hospital ever fulfilled his duties with more assiduity and punctuality, two qualities to be reckoned amongst the virtues of a teacher." (See *Guy's Hospital Gazette*, vol. i., 1873, article by Dr. Wilks.) Somewhat late in his life, Dr. Rees was appointed Physician Extraordinary to H. M. the Queen. In 1844 he became a Fellow of the Royal College of Physicians; in 1852–3 he was one of the Censors of the College, and in 1863–4 he was its Senior Censor.

Dr. Rees' principal contributions to medical literature were: "On the Analysis of the Blood and Urine in Health and Disease," and on the "Treatment of Urinary Diseases"; "the Treatment of Rheumatic Diseases by Lemon-juice"; the "Nature and Treatment of Diseases of the Kidney connected with Albuminous Urine"; and his Lettsomian, Croonian, Hunterian, and Harveian Orations. In the first-named of these works Dr. Rees in graceful terms refers to the "kind encouragement" he received from Dr. Bright in that line of research. The beginning of that work he did when he was "a mere boy." Dr. Rees was the first to point out what he regarded as the great value of lemon-juice in the treatment of rheumatic diseases. This short tract is full of suggestions to the reader of to-day. Amongst other things, it is curious to note how a treatment for rheumatic conditions which has all but, if not altogether, gone out of use, is supported by the evidence in its favour of cases taken from hospital practice. In his writings concerning the chemistry of the urine, Dr. Rees is seen decidedly at his best as an author and observer and as a patient worker. In looking through that portion of his writings, one realises how, step by step, by slow and laborious work, our present knowledge of the chemistry of the urine was built upon a foundation laid with infinite care and toil by medical observers, amongst whom he occupies a position of mark. In the closing sentence of the Hunterian Oration which he delivered before the Hunterian Society in 1854, there is perhaps a good indication of his mental attitude towards every intellectual pursuit. These are his words: "..... a path to be followed with the humility of the child, the resolution of the man, and the calm dignity of the philosopher, whose tutored mind, while it admits that everything is possible, still requires satisfactory evidence in order to believe in anything."

Dr. Rees died on May 27th from the results of cerebral hæmorrhage. He was unmarried.

Medical News.

UNIVERSITY OF CAMBRIDGE.—The following gentlemen have been examined and approved in the respective examinations for Medical and Surgical degrees:—

First Examination.

Chemistry and Physics.—Barker, Emman.; Barrett, Caius; J. E. Bates, Queen's; Berry, King's; Blumfeld, Caius; Bolus, Jesus; Bowes, Caius; Bowring, Caius; Burkill, Caius; Burton, King's; Cameron, Joh.; Carter, Caius; Cornwall, Trin.; Cowan, King's; Daniel, Emman.; Fletcher, H. Cav.; Fry, Pemb.; Garner, Emman.; Goodman; Ds. Grosvenor, Clare; Groth, Jesus; Hadow, Caius; Harrison, Caius; Henderson, Joh.; Higgins; Hofmeyr, Trin. H.; Hood, H. Cav.; Hunt, Clare; Jackson, Clare; Johnson, Trin. H.; Key, Emman.; T. P. King, Joh.; Kingdon, Caius; Ds. Leach; F. H. Lewis, Joh.; P. R. Lowe, Jesus; McCarthy, Caius; Mackenzie, Caius; C. E. Marriott, Clare; G. J. K. Martyn, Caius; Mathew, Trin. H.; May, Clare; Moore, H. Selw.; Morrison, Caius; Murphy, Caius; Ds. R. E. Nix, Caius; Ds. Norris, Christ's; Ll. Powell, Trin.; Rotherham, Trin.; Sandall, Joh.; Seccombe, Joh.; Ds. A. Shillitoe, Trin. H.; Smallwood, Caius; Sparks, Caius; Stanton, Magd.; Ds. Still, Caius; Taylor, Emman.; Twigg, Christ's; H. F. B. Williams, Caius; O. K. Williamson, Trin.; Wright.

Elementary Biology.—Allen, Caius; Allen, King's; A. C. Ambrose, Down; Anderson, Pemb.; J. E. Bates, Queen's; Bedford, Trin.; N. G. Bennett, Joh.; Berry, King's; Bowring, Caius; Burk Caius; Burton, King's; Cameron, Joh.; Carter, Caius; Coghlan H. Selw.; Colby, King's; Cornaby; Cornwall, Trin.; Cowan King's; Counsell, H. Cav.; Daniel, Emman.; Ds. N. Devereux; H. Selw.; Eichholz, Emman.; A. E. Elliott, Joh.; Fison, Corpus, Frink, Pet.; Fry, Pemb.; Garner, Emman.; Goodman; Groth, Jesus; Guinness, Caius; Haigh, Joh.; Ds. H. M. Harrison, Trin.; Hayne, Caius; Hedges, Sid.; Henderson, Joh.; Hofmeyr, Trin. H.; Hood, H. Cav.; C. L. Hopkins, Caius; Hort, Emman.; Kemp, Trin. H.; F. H. Lewis, Joh.; S. H. Long, Caius; McCardie, Caius; McCarthy, Caius; Mackenzie, Caius; Macnamara, Pet.; Marshall, Caius; G. J. K. Martyn, Caius; Mathew, Trin. H.; Maxwell, Corpus; Mills, Clare; Milward, Clare; Mitchell, Queen's; Muntz, Trin.; Murphy, Caius; Ds. Nachbar, Clare; Nesham, Trin.; Palmer, Queen's; Pilley, Down; Reece, Down; Richmond, Christ's; Sandall, Joh.; Sell, Caius; G. G. Smith, H. Cav.; Somers, Pemb.; Sparks, Caius; Stanton, Magd.; K. S. Storrs, Emman.; Taylor, Emman.; C. Todd, Clare; Townson, Emman.; Twigg, Christ's; Verdon, Jesus; O. K. Williamson, Trin.; Windsor; Woodward, Down; Wright.

Second Examination.

Pharmaceutical Chemistry.—Allen, Christ's; Appleyard, Emman.; Barnes, Pemb.; Barraclough, Joh.; Bird, Emman.; Ds. Bliss, Sid.; Christopherson, Caius; Collcutt, Caius; Ds. A. Cortes, Trin. H.; Delbruck, King's; Mag. Fenoulhet, Corpus; Gardner, Caius; F. B. Glover, Joh.; L. N. Harding, H. Selw.; Harris, Caius; Heaton, Trin.; Heppell, Caius; Jerrard, Caius; Ds. Lewis, Joh.; Moysey, Caius; Norbury, Trin.; Ormerod, Trin.; Pooley, Caius; Pridham, Caius; A. S. Ransome, Trin.; Ransome, Caius; W. G. Richards, Christ's; Ds. Rogers, Caius; Ds. Rolfe, Clare; Roughton, Joh.; Russell, Down; Mag. Samways, Joh.; Ds. H. Simpson, Joh.; Slater, Caius; Ds. Stephens, Caius; Sworder, King's; Thurnell, Emman.; Trethewy, Caius; Turner, Trin.; Woodrooffe, Caius.

Human Anatomy and Physiology.—Broadbent, Trin.; Brooksbank, Trin. H.; F. W. Burton, Joh.; Buttar, Pemb.; Ds. Colclough, Caius; Crofton-Atkins, Clare; Ds. F. J. Dixon, Trin.; Ds. Doman, Caius; Ds. H. England, Caius; Ds. Felce, Jesus; Fish, Christ's; Ds. Hales, Clare; Ds. Hardwick, Clare; Harvey, Joh.; Heppell, Caius; Hoffmeister, Caius; P. Langdon-Down, Trin.; Law, Christ's; Ds. Lee, H. Cav.; Ds. G. A. Mason, Joh.; Ds. Master, H. Cav.; C. G. Monro, Caius; Ds. Murchison, Trin.; Mag. Phillips, Queen's; Ds. Powell, Cla.; Mag. Samways, Joh.; Sevestre, Trin.; Ds. W. H. C. Shaw, Jesus; Ds. Surridge, Caius; Ds. Thomas, H. Cav.; Watkins, Caius; A. H. Wilson, Christ's; Windsor, Emman.; Wrench, H. Cav; Ds. F. C. Young, Joh.

Third Examination.

PART 1.—Mag. Anson, Trin.; Ds. Beauchamp, Caius; Mag. Bickersteth, Trin.; Ds. Cayley, Pemb.; Ds. Cobbett, Trin.; Mag. B. B. Connolly, Caius; Ds. H. J. Cooper, Caius; Ds. Cordeux, Caius; Ds. Creswell, H. Cav.; Ds. Daggett, Caius; Mag. Dalton, Trin.; Ds. G. H. S. Daniell, Caius; Ds. Dewhurst, Trin.; Mag. Douty, King's; Mag. Dumergue, Corpus; Ds. Edkins, Caius; Mag. Edwards, Joh.; Ds. H. A. Francis, Joh.; Ds. Heywood, Trin.; Mag. Holden, Caius; Ds. Low, Caius; Ds. Metcalfe, Trin.; Ds. Muir, Trin.; Ds. H. W. Nix, Caius; Ds. C. S. Pollock, Trin.; Ds. H S. Pope, H. Cav.; Ds. Rendel, Clare; Ds. Richards, Down; Ds. Ronald, Trin.; Ds. Saunders, Trin.; Ds. Scott, Pet.; Ds. Stanley, Pet.; Ds. Stevenson, Christ's; Ds. C. E. Williams, Caius.

PART 2.—Mag. Anson, Trin.; Ds. Arkwright, Trin.; Ds. Barnett, Caius; Ds. Battersby, Trin.; Ds. Beddoes, Pemb.; Ds. J. E. C. Bradley, Caius; Ds. Bromhead, Jesus; Ds. Campbell, H. Cav.; Ds. E. H. Colbeck, Caius; Ds. Court, H. Cav.; Ds. T. G. Crump, Emman.; Ds. Drabble, Caius; Ds. Edgeworth, Caius; Ds. Elsmore, Christ's; Ds. F. P. Evans, Joh.; Ds. Fyffe, Caius; Ds. A. J. Hall, Caius; Ds. Hopkinson, Emman.; Ds. Kelsey, Trin.; Mag. G. T. Lloyd, Joh.; Ds. Murray, Trin.; Ds. Ogilvie, King's; Ds. Olive, Joh.; Ds. G. R. Saunders, Caius; Ds. Sortain, Christ's; Ds. Stephens, H. Selw.; Ds. Syfret, Trin. H.; Ds. A. G. Welsford, Caius; Ds. Wessels, King's; Ds. Weston, Caius.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen, having passed the required examinations, have been admitted Fellows of the College:—

B. M. Blennerhassett, Surgeon-Major Medical Staff, and E. I. Read, Government Medical Officer, Trinidad, West Indies.

WESTMINSTER HOSPITAL MEDICAL SCHOOL, Caxton-street, Westminster, S.W.—The following Entrance Scholarships in Science have been awarded this session: Mr. E. Spencer (£100), Mr. E. Nowell, B.A. (£40), and Mr. H. M. Dowler (£40).

TWO NEW HOSPITALS IN MOSCOW.—Two new hospitals have just been opened in Moscow. One of these is a lying-in clinic attached to the University, the funds for building being given by Mdme. Pashloff. The other is an asylum for insane patients. This, too, has been given by a lady, Mdme. Alexieff, the wife of a high city official. It is situated near the Preobrashenski Asylum, and will be under the charge of the medical staff of that institution.

ISOLATION HOSPITAL AT HORNSEY.—An isolation hospital for cases of infectious disease, erected by the Hornsey Local Board at Irish-corner, Tatterdown-lane, was opened last Saturday. The building is a model hospital, fitted with the most approved appliances that science has yet suggested, and is likely to be reproduced by other sanitary authorities in different parts of the kingdom. The hospital is fitted with ten beds, but is capable of accommodating a much larger number of patients if necessary.

VOLUNTEER MEDICAL STAFF CORPS.—The Volunteer Medical Staff Corps of London, Maidstone, Manchester, Leeds, Edinburgh, and Aberdeen have received permission from the War Office to join the regular troops at Aldershot, on Saturday, August 3rd, for a week's training. The corps will number about 500. Surgeon-Commandant Norton, of the 1st London Division, will command, and will have for his adjutant Surgeon Morris (Medical Staff).

MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA. The following changes have been made in the Faculty:—Frank Woodbury, A.M., M.D., Honorary Professor of Clinical Medicine; William B. Atkinson, A.M., M.D., Honorary Professor of Sanitary Science and Pædiatrics; John V. Shoemaker, A.M., M.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine; James M. Anders, Ph.D., M.D., Professor of Hygiene and Clinical Diseases of Children.

DROWNING FATALITY.—Three men took a boat on Monday last for a row on the water at the Welsh Harp, Hendon. In changing places their boat was capsized, and all were thrown into the water. Two men of the 1st London Engineer Volunteer Corps—who are encamped in an adjoining field—swam out and saved two of the men, but the third was drowned. The body has not yet been recovered. It is believed that the deceased was a native of West Hampstead.

HOSPITAL FOR EPILEPSY AND PARALYSIS, REGENT'S-PARK.—The annual meeting of this hospital was held on the 13th inst. at Willis's Rooms. The chairman (Canon Duckworth) referred to the foundation of the hospital twenty-two years ago, and to the taking seventeen years since of the eligibly situated premises now occupied by the institution, the lease of which would expire in ten or eleven years; and, as it was rumoured that the whole row of houses would be pulled down, it therefore appeared the time had arrived for raising a building fund for the erection of a suitable building as near the present site as possible.

OPENING OF A CONVALESCENT HOME AT MATLOCK.—The opening ceremony of this institution was performed by Lady Edward Cavendish on the 13th inst. It is the outcome of a small similar home, opened at Micklefover in 1872. This new Home (Lime-tree House, at Matlock Bank) will accommodate thirty-five patients, and has been purchased for £1950. The alterations, furnishing, and other expenses have brought the total to £2850. The receipts from various sources have amounted to £3041 13s. 9d., leaving £200 balance towards the working expenses. The annual expenditure is estimated at £500, of which £70 a year has been promised.

QUEEN'S COLLEGE, CORK.—The following prizes, exhibitions, &c., have been awarded at the sessional examinations in the Faculty of Medicine:—Experimental Physics (prize): D. J. O'Connor. Chemistry: 1st, William McMath; 2nd, W. J. Shannon and W. A. Rountree; 3rd, T. T. McKendry. Practical Chemistry: 1st, W. McMath; 2nd, W. A. Rountree; 3rd, J. A. Burns. Zoology: 1st, William McMath and W. A. Rountree equal. Practical Anatomy (first year): 1st, D. J. McCarthy; 2nd, W. H. Garde; 3rd, W. J. Shannon. Midwifery: 1st, John Hennessy; 2nd, Ernest V. Eames. Medical Jurisprudence: 1st, John Hennessy. Exhibition in Practical Midwifery: John Hennessy.

BEQUESTS AND DONATIONS TO HOSPITALS.—The late Mr. Charles Anstead, of Pentonville-place, Islington, has bequeathed £100 each to St. Bartholomew's Hospital, the London Fever Hospital, the Royal Free Hospital, and the Middlesex Hospital. — The Salters' Livery Company, London, has given £21 to the Convalescent Home Fund, in connexion with the Chelsea Hospital for Women, in addition to their annual subscription.—The Borderers' Company, London, has granted a donation of 10 guineas to the funds of the Provident Surgical Appliances Society.—Under the will of the late Mr. John Richardson, of Manchester, the Manchester Royal Infirmary receives £2000.—The family of the late Mr. Charles Thompson, of Cardiff, has presented £4500 to the Glamorganshire and Monmouthshire Infirmary, as a memorial to the institution of which Mr. Thompson was president.—Mr. Samuel Cunliffe Lister, of Swinton Park, Masham, Bradford, has forwarded to the Committee of the Harrogate Bath Hospital and Rawson Convalescent Home £500 towards the building fund.—Mr. Thomas William Restell, late of 19, Gordon-square, London, has bequeathed £105 each to the City of London Hospital for Diseases of the Chest (Victoria Park), and St. Peter's Hospital for Stone (Covent Garden).—The late Miss Mary Eason, of Ladbroke-gardens, Notting-hill, London, has bequeathed, after payment of various legacies and annuities, the residue of her property, upon trust, to the Middlesex Hospital.—Mr. Godfrey Baker has left £50 to the Cork South Infirmary.

PROPOSED NEW GYMNASIUM FOR BIRMINGHAM.—A scheme is on foot for the establishment of a new gymnasium, which, if carried out on liberal and broad lines, should undoubtedly be a success. At the present there are only two important ones in our midst—Bingley Hall and the Grammar School; though gymnastic clubs exist in several localities. The Edgbaston College for Girls also has a well-fitted gymnasium replete with all modern advantages and improvements. Of late years there has been a great development in the practice of physical exercises, the Board schools being prominent in this form of teaching. Recreation is a necessity of our nature, and the desire to turn this to its greatest advantage in promoting healthy and manly sports must be productive of good results on the rising generation, and ensure a higher standard of moral efficiency.

MEDICAL NOTES IN PARLIAMENT.

Ophthalmia in Schools.

IN the House of Lords, on Tuesday, June 18th, Viscount Torrington, in reply to the Earl of Strafford, stated that the attention of the Local Government Board had been directed for many years to the ophthalmia existing in the Central London District Schools at Hanwell. In 1874 they caused the schools to be examined with respect to ophthalmia by Mr. Edward Nettleship. His report was sent to the managers, and the following year the views of the Board were conveyed to them, containing various suggestions as to the isolation of the affected children, and a more complete system of quarantine to prevent the introduction of ophthalmia into the school from without; also hygienic recommendations as to out-door exercise &c. Unfortunately these recommendations had been up to a recent period not fully adopted by the managers. The disease increased last year, and the Board renewed their recommendations, with the result that the managers have determined to arrange for the isolation of between 300 and 400 ophthalmic cases under a medical officer specially engaged, and also to effect other important improvements.

Flogging in the Army.

In the House of Commons, on Monday, June 17th, in Committee of Supply on the Army Estimates, Mr. E. Stanhope, Secretary for War, in reply to various members, stated that there was not the smallest idea, direct or indirect, of reintroducing flogging into the army. The number of military prisons had been reduced, and he thought that they might see their way to some further decrease.

Army Medical Department.

On the vote of £299,500 for medical establishments, Dr. Farquharson congratulated the Secretary of State for War upon the appointment of a committee to inquire into matters affecting the medical service of the army. There was a good deal of discontent in the medical departments, and he hoped that the report of the committee would bring about some kind of finality.—Mr. A. O'Connor inquired whether it was a fact that typhoid fever had broken out within the last fortnight in the Ship-street Barracks, Dublin.—Mr. E. Stanhope said that he had not himself heard of any recent case of typhoid in Ship-street Barracks, although, undoubtedly, there had been one or two cases there; and he was afraid that the condition of the barracks was exceedingly bad. When he made his visit there the other day he came to the conclusion that as soon as it could be done a portion of the barracks should be pulled down. He was sorry to say there had been one or two cases at the Richmond Barracks. He hoped to lay the report of the committee on the table of the House before the close of the session.—Mr. Hanbury complained that every day about 5 per cent. of our soldiers were on the sick list, greatly owing to insanitary barracks. Medical men were appointed with large salaries to see to these barracks, the unhealthy state of which was only discovered after deaths occurred. Those responsible for that state of things ought to be punished.—Sir F. Fitz-Wygram said he had no complaint to make of the class of medical officers who joined the army or of their scheme of education, but he thought that, owing to the constitution of the army, healthy men only being admitted, there was and must be a want of practice. A young medical man entering into civil employment would see more cases in one week than another entering the army would see in a year.—He suggested that army medical officers should have facilities afforded them for obtaining experience outside the army.—Colonel Nolan asked for information with regard to the medical reserve.—Mr. E. Stanhope stated that under the present arrangements there was a reserve of medical officers—that was to say, men who had retired from the service—who were at call in case of emergency. Their names were to be found in the Army List.—The vote was agreed to.

Rabies.

On Tuesday, the 18th, Mr. Matthews, in reply to Mr. Norris, stated that the Privy Council were now considering the recommendation of the London County Council to make compulsory and stringent regulations for the whole kingdom as to the muzzling and detention of dogs. The total number of mad dogs killed during the first five months of the current year was 23, and the number of stray dogs captured during the month of May 1786.

New Medical Bill.

Sir W. Foster obtained leave to introduce a Bill to amend "The Medical Act, 1886."

Supply.

In Committee of Supply on the Navy Estimates, the vote of £121,000 for medical establishments and services was agreed to without discussion.

Soldiers' Food.

In Committee on the Army Estimate, Sir W. Barttelot, General Fraser, and others complained at some length of the quality, quantity, and cooking of the food supplied to the troops.—Mr. Stanhope, in reply, pointed to the recent improvements effected in the dietary of the troops, and quoted extracts from the report of the Committee on Rations to show that recruits gained enormously in general condition, strength, and breadth of chest.

Soldiers' Clothing.

Mr. Hanbury pointed out that the medical officers of every district complained of the insufficient clothing of the recruits in winter, and attributed a good deal of the consumption to be found in the army to that cause.—Mr. Stanhope replied that in consequence of the reports of the medical officers the special attention of commanding officers had been called to the subject, and he believed proper care would be taken. Steps were being taken that soldiers returning from foreign service should be provided with warm clothing.

Insanitary Barracks.

Mr. Campbell-Bannerman and other members took up this question, and complained of the frequently insanitary condition of the barracks, special reference being made to the Dublin and Portsmouth Barracks; whilst Mr. Waddy criticised the state of the Dover barracks, and Colonel Nolan characterised the Galway barracks as the worst in the United Kingdom.—Mr. Stanhope, in reply, stated that the condition of the various barracks complained of was engaging his attention, and they should not be neglected. The Government thoroughly intended to grapple with the crying evil, although they could not mature a complete scheme this session. The various votes were agreed to.

The Cruelty to Children Bill

On Wednesday, the 19th, the House went into Committee on the Cruelty to Children Prevention Bill. The penalties imposed by the Bill for the ill-usage of children by their guardians were greatly increased. The Committee was engaged fixing the limit of hours during which such children should not be allowed to be employed in the streets, when progress was reported.

The Vaccination Commission.

On Thursday, the 20th, Mr. Ritchie, answering Mr. Channing and Mr. Summers, said he had received numerous letters and resolutions from various anti-vaccination societies, but evidently having a common origin, urging the addition to the Royal Commission of one or more avowed anti-vaccinationists. The Government, however, considered that an impartial and thorough investigation would be secured by the Commission, whose scope would not be altered nor number added to.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BOXALL, ROBERT, M.D., M.R.C.P., has been appointed Assistant Obstetric Physician to the Middlesex Hospital, vice Dr. William Duncan, appointed Obstetric Physician.

COOK, H. G. G., M.R.C.S., L.R.C.P., has been appointed House Physician to the Royal Free Hospital.

COOPER, W. F., L.R.C.P., L.R.C.S.Edin., has been appointed Medical Officer of the Eighth District of the Newmarket Union.

EVANS, WILLMOTT H., M.D.Lond., B.Sc., M.R.C.S., L.S.A., has been appointed House Physician to the Royal Free Hospital.

HIRST, A., M.D. St. And., F.R.C.P. Edin., has been reappointed Medical Officer of Prestwich Union District.

HUTCHINSON, A. C., M.D.Aber., M.B., C.M., has been appointed District Medical Officer Shoreditch Union, vice Rowe, resigned.

NAPPER, A. A., M.R.C.S., L.S.A., has been reappointed Medical Officer of the Hambledon Union.

OLIVER, F. HEWITT, M.R.C.S., has been appointed a District Surgeon to the City of London Lying-in Hospital, vice Dr. Roe, deceased.

STABB EDWIN C., F.R.C.S., L.R.C.P., L.S.A., has been appointed Senior Resident Medical Officer to the Royal Free Hospital, vice Tonks, resigned.

TAYLOR, CHARLES H., M.B.Lond., M.R.C.S., L.R.C.P., and L.S.A., has been appointed House Surgeon to the Derbyshire General Infirmary, vice J. A. Southern, resigned.

THOMPSON, ISAAC, M.B.Edin., has been appointed Assistant Medical Officer, Coventry Union.

WIGHTWICK, F. P., M.B., M.R.C.S., L.R.C.P., D.P.H., has been appointed Medical Officer of Health, St. Olave's District, Southwark, vice J. Northcothe Vinen, M.D., resigned

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BURY DISPENSARY HOSPITAL.—Junior House Surgeon. Salary £60 per annum, with board (except beer), furnished apartments, and washing.

CHARING-CROSS HOSPITAL.—Assistant Dispenser. Commencing salary £90 per annum. Also Assistant Anæsthetist.

CHILDREN'S HOSPITAL, PENDLEBURY.—Junior Resident Medical Officer. Salary £80 per annum, with board and residence.

DERBYSHIRE GENERAL INFIRMARY.—House Surgeon, for six months. Board and washing. No salary, but a bonus of £10 is given.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House Physiciancy. No salary, but board and lodgings are provided free of cost.

GENERAL HOSPITAL, Birmingham.—Two Assistant House Surgeons, for six months. No salaries, but residence, board, and washing provided.

HAVERSTOCK HILL AND MALDEN ROAD PROVIDENT DISPENSARY.—Medical Officer.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. House Physician.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, London, W.—Resident Medical Officer. Salary £50 a year, with board and lodging.

HOSPITAL FOR WOMEN.—The London School of Gynæcology, Soho-square, W.—Clinical Assistants in both Out-patient and In-patient departments.

KING'S COLLEGE, London.—Professor of Dental Surgery and Dental Surgeon.

LIVERPOOL DISPENSARIES.—Head Surgeon. Salary after the rate of £200 per annum, and also an Assistant Surgeon at £80 per annum. Apartments, board, and attendance provided in each case.

LONDON THROAT HOSPITAL, 204, Great Portland-street, W.—House Surgeon. An honorarium at the rate of £50 per annum is paid quarterly.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Resident Medical Officer at Bowden, Cheshire. Salary £60 per annum, with board, apartments, and washing.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant to the House Surgeon. No salary, but board and rooms provided.

ST. LUKE'S HOSPITAL, London.—Resident Clinical Assistant. Appointment for six months, with board and residence.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy.

Births, Marriages, and Deaths.

BIRTHS.

BLAKE.—On June 15th, at Hurstbourne, Branksome-park, Bournemouth, the wife of Thos. Wm. Blake, M.R.C.S., of a son.

JACKSON.—On June 10th, at Winchmore Hill, Middlesex, the wife of J. W. Jackson, M.R.C.S., of a daughter.

KANE.—On June 13th, at Lanhern, Kingston-hill, the wife of N. Henry K. Kane, M.D., of a daughter.

RAMSAY.—On June 12th, at Winton, Bournemouth, the wife of Frank Winson Ramsay, M.B., B.S., of a daughter.

WHITELEGGE.—On June 13th, at 13, Belgrave-square, Nottingham, the wife of Arthur Whitelegge, M.D., of a son.

MARRIAGES.

GARDNER—HELMS.—On June 18th, at the Church of the Ascension, Balham, Percy Herbert Gardner, L.R.C.P., M.R.C.S., of Torquay, to Dagmar, third daughter of L. V. Helms, Esq., of Nightingale-lane, S.W.

HALSTEAD—CANDLER.—On June 20th, at the Wesleyan Church, Brixton-hill, S.W., George Ezra Halstead, M.D., B.S., B.Sc., B.A., M.R.C.S., L.R.C.P., of Albion-hill House, Ramsgate, to Edith, third daughter of George Candler, Newlands, Clapham-park, S.W.

JOHNSON—TUKE.—On June 12th, at the Grange Parish Church, Edinburgh, George Arthur Johnson, L.R.C.P. Lond., M.R.C.S.E., of Woolwich, son of the Rev. J. T. Johnson, Britwell Rectory, Oxfordshire, to Isabella (Ellen) Anderson Tuke, daughter of the late Charles W. Tuke, R.N.

SOUTHERN—LLOYD.—On June 18th, at the Parish Church, Ludlow, by the Rev. E. ff. Clayton, and the Rev. G. H. Kirwood, uncle of the bride, Francis Gerald Southern of Pantyrodin, Llandebie, S. Wales, younger son of John Southern, J.P., of Ludlow, to Alice Mabel, youngest daughter of the late John Lloyd, Esq., of the Broadgate Ludlow, Salop.

SUTTON—TODD.—On June 13th, at Christ Church, Eaton, Norwich, Francis Napier Sutton, F.I.C., F.C.S., of Grosvenor-gardens, Willesden-green, London, to Constance Ellen, second daughter of Walter Todd, of Albemarle, Norwich.

VAUGHAN—MATHEWS.—On June 13th, at SS. Mary and Nicholas Church, Nantwich, Cheshire, by the Rev. Foster G. Blackburne, Vicar, A. Ellis Vaughan, L.R.C.S., L.R.C.P., &c., of Crewe Cottage, Crewe, to Lilian, only daughter of William Mathews, M.D., F.R.C.S., the Manor House, Nantwich.

DEATHS.

EVANS.—On June 15th, at The Oaks, Towcester, Arthur Griffith Evans, M.R.C.S., L.S.A., aged 46.

MACRAILD.—On June 8th, at the Royal Infirmary, Glasgow, Donald MacRaild, of George-square, Greenock, F.R.C.S.Edin., L.F.P.S.Glas., aged 47.

NITCH-SMITH.—On May 20th, at Kurseong, Bengal, India, from pneumonia after cholera, Arthur John Nitch-Smith, M.R.C.S., L.R.C.P., L.M., son of the late Dr. J. A. Smith, South Africa, and son-in-law of the late Captain Douglas Wales, H.E.I.C.S., Harbourmaster of Mauritius, aged 28.

RADCLIFFE.—On June 18th, at his residence, Cavendish-square, W., C. B. Radcliffe, M.D., F.R.C.P. Lond., Consulting Physician to the Westminster Hospital and the National Hospital for the Paralysed and Epileptic, aged 67.

THOMAS.—On June 13th, at Aberffraw, Anglesey, William E. Thomas, L.R.C.P. Edin., Green-street, Victoria-park, London.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BAILLIÈRE ET FILS, Paris.

L'Œuvre de C. J. Davaine, Membre de l'Académie de Médecine et de la Société de Biologie; Charbon, Septicémie; Parasitisme, Microbisme; Anatomie, Physiologie; Anomalies, Tératologie. Avec 7 planches. 1889. pp. 863.

Traité des Entozoaires et des Maladies vermineuses de l'Homme et des Animaux Domestiques. Par C. Davaine. Deuxième édition, revue et corrigée. Avec 110 figures intercalées dans le texte. 1877. pp. 1003.

BLACKIE & SON, 49, Old Bailey, E.C., London, Edinburgh and Dublin.

Blackie's Modern Cyclopedia of Universal Information. With numerous pictorial illustrations and maps. Edited by Chas. Annandale, M.A., LL.D. Vol. II. Bla—Con. 1889. pp. 512.

BRAIN, R. S., Government Printer, Melbourne.

Select Extra-tropical Plants, readily eligible for Industrial Culture or Naturalisation, with indications of their native countries, and some of their uses. By Baron Fred. Von Mueller, K.C.M.G., M.D., &c., Government Botanist for Victoria. Seventh edition, revised and enlarged. 1888. pp. 517.

CHURCHILL, J. & A., New Burlington-street, London, W.

Commercial Organic Analysis. A Treatise of the Properties, Proximate Analytical Examination, and Modes of Assaying the various Organic Chemicals and Products employed in the Arts, Manufactures, Medicine, &c. By A. H. Allen, F.I.C., F.C.S. Second edition, revised and enlarged. Vol. 3, Part I. Acid Derivatives of Phenols, Aromatic Acids, Tannins, Dyes, and Colouring Matters. 1889. pp. 431.

On Bronchial Asthma. Its Pathology and Treatment. By J. B. Berkart, M.D. Second edition. 1889. pp. 220.

DAVIS, F. A., Filbert-street, Philadelphia.

Lessons in Gynecology. By William Goodell, A.M., M.D. Third edition, revised and enlarged, with 112 illustrations. 1887. pp. 579.

KELLOGG & SON, Milk-street, Boston, U.S.

Transactions of the American Orthopedic Association. Vol. I. 1889. pp. 303.

MACMILLAN & Co., London.

Children of the State. By Florence Davenport-Hill. Edited by Fanny Fowke. Second edition, revised and enlarged. 1889. pp. 370. Price 6s.

The Causes and Treatment of Lateral Curvature of the Spine. By Richard Barwell, F.R.C.S. Fourth edition, almost entirely rewritten, with numerous illustrations. 1889. pp. 240.

Inorganic Chemistry. By Ira Remsen. 1889. pp. 827.

SIMPKIN, MARSHALL, & Co., London.

The Ghost of Dunboy Castle. By Huberto. Vols. 1 and 2. 1889. pp. 236 and 266.

Further Observations on the Use of Ozonised Oxygen in the Treatment of Phthisis; by A. Ransome, M.D., F.R.S. (John Heywood, Manchester and London).—The Power of the Will; by Tom Robinson, M.D. (Gilbert and Rivington, London, 1889).—Report on the Trinidad Leper Asylum, for the year 1888, with an Account of some Cultivation Experiments with the Bacillus Lepræ; by Beaven Rake, M.D.Lond., Medical Superintendent (the Government Printing Office, Port of Spain, 1889).—Forslag til Plan for den medicinske Undervisning ved kgl. Fredriks Universitet i Kristiania—Udarbeidet af den af den "Norske Lægeforening" paa Lægemodet i Kristiania, Septbr., 1887 Nedsatte Kommission, Kristiania, 1889.—Des Indications des Eaux de Contrexéville; par le Dr. Debout D. Estrées; Causerie Conférence faite le 27 août, 1888, devant la Caravane hydrologique organisée par la Société Française d'Hygiène (George Carré, Paris, 1889).—Cremation and Urn Burial, or the Cemeteries of the Future; by W. Robinson (Cassell and Company, London, 1889).—New Verse in Old Vesture; by John Cameron Grant, with an Introductory Preface by Gleeson White (E. W. Allen, London, 1889), price 1s.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 20th, 1889.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
June 14	30·00	S.W.	59	55	90	66	54	..	Cloudy
,, 15	29·98	W.	60	57	94	69	57	..	Overcast
,, 16	30·10	N.E.	60	55	113	74	55	·33	Bright
,, 17	30·20	E.	63	57	110	69	56	..	Bright
,, 18	30·24	E.	57	54	109	68	51	..	Overcast
,, 19	30·12	E.	59	54	117	70	50	..	Cloudy
,, 20	30·09	E.	57	54	117	75	54	..	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

ENGLISH HUMORISTS IN ART.

AN exhibition of the works of the English humorists in art has been opened at the Royal Institute of Painters in Water Colours in Piccadilly, having probably been suggested by a similar French exhibition held in Paris last year. This collection is comprehensive alike in respect of time, artists, and subjects; but to us one of the most striking features is that although the doctor has always been a favourite object of satire and caricature, we find here scarcely an allusion to the medical profession. Perhaps the nearest approach to an attack is to be found in the original prospectus of *Punch* here exposed, where it is held out as an inducement to the public that "the facetiæ will be contributed by the members of the following learned bodies," among which occur "The College of Physicians and the Highgate Cemetery." Thus, our withers being unwrung, we can enjoy the wit displayed at the expense of others; and if we find Gillray, Rowlandson, and Cruikshank less amusing than did our fathers, probably Caldecott, Du Maurier, and Charles Keene will fully make up for any deficiencies.

Mr. William Wallace.—The facts should be stated to the Registrar-General.

Mr. C. S. Jeaffreson.—Very soon.

THE CAVENDISH LECTURE.

To the Editors of THE LANCET.

SIRS,—In reference to your very excellent report of the Cavendish Lecture in your last issue, may I point out one omission—viz., that it was delivered by Dr. Andrew before the West London Medico-Chirurgical Society? The Cavendish Lecture was founded in the first year of the Society, and is given, on invitation, annually by some physician or surgeon of eminence.

I am, Sirs, your obedient servant,

PHIN. S. ABRAHAM, Hon. Sec. W.L.M.C.S.

Nottingham-place, W., June 18th, 1889.

"VOYAGES FOR INEBRIATES."

IN answer to our correspondent of last week, *W.B.* states that the City Line of steamers to India (Messrs. Geo. Smith and Sons) is a teetotal line.

T. (Northampton).—The sentence can only be inserted as an advertisement.

Dr. Oliver.—Yes.

SHOWERS OF SAND.

INVALIDS, and even more robust residents, on the Riviera Levante, as the Italian seaboard from Genoa to Spezia is called, are sometimes unpleasantly conscious of sand-laden winds, which make respiration anything but agreeable. These, in the spring especially, from April to the middle of May, often end in veritable showers of sand, covering the foliage of trees, the roofs and terraces of houses, and, indeed, all exposed surfaces, with a thin stratum of finely pulverised, desiccated earth. The Padre Denza, of the Royal Observatory of Moncalieri, near Turin, one of the most distinguished meteorologists in Europe, has bestowed much attention on this phenomenon, which he traces to storms in the Grand Sahara stirring up the sand, which is carried thence on atmospheric waves of low pressure across the Mediterranean to the European, and notably to the Italian, shores. On May 12th, according to his recent report, a violent tempest raged over the northern surface of the African Désert, as was announced at his Observatory by telegrams from Biskra. This, advancing towards Italy, brought heavy rains and strong gales into the Alta Italia (Upper Italy), and therewith a fall of sand much denser than those which had been observed between the 8th and 10th. This fall was at its maximum on the night between the 14th and 15th, and extended from the Ligurian Apennine over Novi and Tortona to Milan, and even beyond it, covering with a fine coating the leaves of the trees, the house-roofs and terraces, and the marble statues in the public squares. Quantities of this African sand were collected by the Padre Denza himself and by the directors of the other observatories in the Alta Italia. The phenomenon, until explained by the Padre, was popularly ascribed to the *luna rossa* (red moon) of April, which still figures as the cause of it in the weather forecasts of the catchpenny almanacs of Southern Europe.

Tempus.—Dr. B. W. Richardson's Cantor Lectures; "The Case for Total Abstinence," by W. J. Lacey; or "The Science Text-book of Temperance," by F. R. Lees, published by J. W. Leng, National Temperance Publication Depôt, 32, Paternoster-row, E.C.

W. B. has not enclosed his card.

A CASE OF DIVERS' PARALYSIS.—A WARNING.

To the Editors of THE LANCET.

SIRS,—A powerfully-built man, at least 6ft. 3in. in height, from Trinidad, and tattooed on both forearms, is going the round of the hospitals just now. He was admitted into this infirmary on May 29th, stating that he had not previously been under any treatment for his disease. On my discovering that he had recently been in the Manchester Infirmary, he at once, at his own request, left this infirmary, after being here only five days. I have since discovered that his case was reported (in the *Medical Press and Circular*, May 1st, 1889) by Mr. C. J. Nixon of Dublin, under whose care the man only stayed two days. The man's statement to me as to the length of illness differs by a month and a half from what he seems to have told Dr. Nixon; and I therefore think the history of the case, unless it could be independently confirmed, most unreliable. What the man's object is in constantly changing his abode from hospital to hospital I do not know, unless it be to find the one where most to eat and drink is to be obtained. The former appetite we were willing to satisfy, but not the latter.

I am, Sirs, yours faithfully,

JOHN J. WEAVER, House Surgeon.

The Infirmary, Southport, June 18th, 1889.

RISKS OF MEDICAL JOURNALISM IN FRANCE.

A WELL-KNOWN Paris medical journal has had to stand a lawsuit for libel brought by an insurance company whose doings had been exposed in its columns. It seems that this enterprising company had been in the habit of sending agents round to medical practitioners, offering them the post of "medical inspector" for the particular districts in which they resided. These appointments were usually accepted. A few days afterwards the agent would return, bringing a paper to be signed by the newly appointed medical inspector, who was assured that it was "merely a matter of form." Nothing further was generally heard of the society, for there was nothing to inspect, until a considerable period had elapsed. The medical inspector was then somewhat surprised to receive a formal demand for an entrance fee and the first of a series of annual premiums, for which he had unintentionally rendered himself liable. The medical journal alluded to ventured, in the interests of the medical public, to make some inquiries on the subject of this insurance society, with the result that it was discovered that nearly all the practitioners in certain districts had been honoured with appointments as medical inspectors. In one instance, indeed, two gentlemen residing in the same house had been asked, and had consented, to accept the post. Fortunately, the court found that the medical journal had acted entirely within its rights and in the interests of its readers, and consequently gave judgment with costs in its favour.

TROUBLES IN THE CHANGE OF VOICE AT PUBERTY.

DR. FAVITSKI, writing in the *Meditsinskoë Obozrênie* on the change of voice at puberty, gives some observations made in Prof. Simanovski's laryngological department of Prof. Koshlakoff's clinic in St. Petersburg. Two kinds of faulty conditions occur in the larynx at puberty. In one there is irregular, incoördinate, and at the same time insufficient action of the neuro-muscular apparatus amounting to a paresis, sometimes even to paralysis, affecting the muscles which contract the glottis. In the other form the patient has a normal larynx, with the voice of a eunuch, through absence of harmonious action of the muscles of phonation, or through faulty formation of the vocal apparatus. Fournié devised the following ingenious method of gymnastics for the larynx. The patient is during the first three or four days ordered to practise slow and deep inspirations and expirations, uttering at the same time a very deep sound, which is generally extremely difficult for him. Having become expert, he is taught to pronounce vowels in the same deep voice, to spell sentences, and to say well-known prayers. Gradually he begins without much trouble to speak with a new and ordinary voice. Fournié cured by this method all his thirteen patients, and Gorell seven. Dr. Favitski mentions two cases which he cured by Fournié's method in ten and nine days respectively, one of them being that of a youth of sixteen years of age, whose vocal cords and mucous membrane had a very red, dry, and swollen appearance. The cords did not meet in phonation, but formed a triangular space. This state had been considered to be merely an exacerbation of a chronic laryngeal catarrh, and treated in vain for two months and a half by local astringents and electricity.

PARTIAL OBESITY.

H. F.—This pathological symptom has lately been dealt with by Dr. Bollinger of Munich. In his memoir on the subject he describes the case of a man, forty-five years of age, who had served all through the Franco-German War (1870-71), and who for the last six years had suffered from *parzielle Fettsucht* (partial obesity). The cheeks, the chin, the throat, the thorax, and the upper arms exhibited accretions of adipose tissue quite morbid in their excess. The patient could not account for it, as he had lived sparingly, had inherited no tendency to obesity, and had transmitted the same to none of his children, twelve in number. Dr. Bollinger finds the disease to be more common among men than women.

DIGNITY AND DISPENSARIES.

J. D.—We are not prepared to condemn a medical man for recommending "his own patients" to prefer one kind of provident arrangement to another. It is another matter when a medical man "touts" among the patients of other practitioners. If our correspondent will give us proof of this, we shall try to give it publicity.

Palazzo Buonocanto.—The best way will be for the surgeon to take rooms in London, having them in a central part. He can then visit the various hospitals as he may wish. Any of the physicians or surgeons will be pleased to see an Italian colleague and give permission to visit with them, and afford such information as may be desired. It is advisable that the surgeon should bring some letters of recommendation, or on calling at a hospital have his card presented to the gentleman with whom he wishes to form acquaintance.

Medicus.—Why should a man wish to call himself so many names—"Doctor, Surgeon, Physician"? The Canadian degree enables him to use the title of "Doctor," and even of "Surgeon"; but it is not yet registrable in this country. He can, on the strength of his Apothecaries' licence (1885), claim for medical services; but neither the "M.D." nor the "C.M." of Canada enables him to claim for surgical services.

M.D. Durham.—"Physiological and Pathological Chemistry," by Dr. Cranstoun Charles (Smith, Elder, & Co., 1884), contains a good account of inosite, with tests.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. B. Hill, London; Dr. F. S. Billings, Nebraska; Dr. G. Harley, London; Dr. G. Johnson, London; The Lord Mayor, London; Mr. Solomon Smith, Halifax; Dr. Jas. Anderson, London; Dr. Hugh Woods; Dr. A. E. Sansom, London; Mr. C. J. Bond, Leicester; Dr. L. B. Bulkley, New York; Rev. T. Smith, Hornsey; Dr. Thomson, Northampton; Dr. J. Oliver, London; Rev. C. G. Williamson, London; Messrs. Lippincott, Philadelphia; Rev. J. P. Thompson, London; Dr. Heasman, Norwich; Mr. Manson, Darlington; Mr. Hayman, London; Messrs. McKesson and Robbins, New York; Dr. Bowie, London; Mr. Haviland, Bridge of Allan; Mr. Hubert; Mr. H. H. Graham, London; Mr. A. J. Jeans, Liverpool; Mr. C. Roberts, Uxbridge; Mr. Lewis, London; Rev. P. Alpe, London; Dr. Allwright, Brighton; Mr. Webb, Bury; Rev. A.

Moore, London; Rev. W. C. Walters, London; Dr. Boobbyer, Nottingham; Mr. Feeny, Nice; Rev. R. R. Connell, London; Mr. Cooke, London; Mr. Montgomery, Philadelphia; Surgeon-Major Stevenson, Jubbulpore; Dr. Shuttleworth, Lancaster; Messrs. McEntagart and Percival, London; Rev. W. Manning, Leytonstone; Messrs. Beal and Sons, Brighton; Mr. Scott, London; Mr. Legate, Hants; Mr. Heather Bigg, London; Mr. Hope, London; Mr. Frowde, London; Mr. Barker Smith, Dulwich; Mr. T. W. Nunn, London; Dr. D. C. Martin, Stourport; Mr. Taylor, Liverpool; Mr. C. Balding, London; Dr. Bristowe, London; Mr. Davidson, Congleton; Mr. Weaver, Southport; Rev. J. Watson, London; Mr. Hawkins-Ambler, Riley; Mr. P. E. Kingsford, Dover; Rev. J. Watson, London; Dr. Abraham, London; Dr. O'Neill, Lincoln; Dr. McBride, Wigton; Mrs. Rogers, Hampstead; Rev. R. Bentley, London; Mr. Symons, Dumfries; Mr. Russell, Liverpool; Mr. Fraser, Glasgow; Mr. Hobley, Dartford; Messrs. Hopkinson and Co., Nottingham; Mr. W. H. Allingham, London; Mr. A. Vander Veer, Albany, N.Y.; Rev. J. de K. Williams, London; Dr. Sydney Phillips, London; Mr. W. Wallace, Mansfield; Mr. Sutton, Cheshire; Dr. Dearden, Church; Mr. Halliday, Glasgow; Dr. H. C. W. Jones, London; Rev. A. Ingleby, Ilford; Dr. Belcher, Gloucester; Mr. F. D. Lewin, Blackheath; Rev. B. Reynolds, London; Rev. H. Gollancy, London; Dr. W. Hill, London; Rev. D. Plaisas, London; Rev. W. H. Kerr, Wimbledon; Mr. Sloan, London; Mr. J. W. Taylor, Birmingham; Rev. R. Wilson, Peckham; Mrs. Meyrick, London; Rev. W. D. Walters, Highgate; Mr. Strapp, Quebec; Dr. W. B. Fergusson, Newtown, Mon.; Mr. Hunt, Manchester; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Surgeon-Major Harrison, London; A Senior Fellow; Tempus; X., Bristol; Locum, London; X., London; J. D.; London Throat Hospital; H. M. R.; Medicus, London; C. F. N.; Windsor Royal Dispensary; X. Y. Z., Abergavenny; Aylesbury Rural Sanitary Authority.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Watt, London; Mr. Redwood, Wales; Mr. Perkins, Bath; Messrs. Read and Campbell, London; Mr. Henderson, Broughton; Mr. Challand, Derbyshire; Messrs. Harthill, Willenhall; Messrs. Van Houten and Zoon, Holland; Mr. Hepburn, Bournemouth; Messrs. Hooper and Co., London; Mr. Mason, London; Mrs. Mosley; Messrs. Bush and Co., London; Mr. Williams, Cornwall; Mr. Keeling, Walthamstow; Mr. Weatherby, Edinburgh; Mr. Vaughan, Nantwich; Mr. Beckton, London; Mr. Whitelegge, Notts; Dr. Woodhead, Leeds; Mr. Coates, London; Mr. Richardson, Kelso; Mr. Brooks, Burnley; Dr. Wilson, Hampstead; Mr. Jackson, Yorks; Mr. Lyle, Dalston; Mr. Heywood, Manchester; Messrs. Shell and Small, Dundee; Dr. Smith, Camberwell; Mr. Winckworth, Beds; Messrs. Taylor, Windermere; C. H., Dorset; L. B. W., London; J. W. G., London; Surgeon, South Wales; B., London; Florence, Yorks; Jacobus, London; Chichester Infirmary; C. S., London; Cantab, Newcastle-on-Tyne; Bristol Eye Hospital; A. B. C., London; Rex, London; Liverpool Hospital for Women; Medicus, Lancs; Medicus, Dewsbury; Weston-super-Mare Hospital; P. B. D., London; Medicus, London; T. W. T.; Edinburgh School of Medicine; L.R.C.P., London; Forceps, Liverpool; The Coppice, Nottingham; Medicus, Margate; M. S. S., London; Beta, London; Clinique, Salop; L. B. B., London; Z. C.; M.R.C.S., Norfolk; Physician, London; Sanitas, London; Medicus, Crewe; F. H., London.

Wellington Journal and Shropshire News, Reading Mercury, Weekly Free Press and Aberdeen Herald, Southern Echo (Hants), Mining Journal, Hertfordshire Mercury, Birmingham Daily Post, Surrey Advertiser, Eastern Morning News, Boston Evening Journal, &c., have been received.

Medical Diary for the ensuing Week.

Monday, June 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, June 25.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
NEUROLOGICAL SOCIETY OF LONDON (St. Marylebone Infirmary, Rackham-street, Ladbroke Grove-road, Notting-hill, W.).—5 P.M. Dr. C. S. Sherrington: Degenerations following Lesions of the Motor Cortex. Demonstration of selected cases by Mr. J. R. Lunn, Dr Beevor, and Mr. Victor Horsley.
ANTHROPOLOGICAL INSTITUTE OF GT. BRITAIN AND IRELAND.—8.30 P.M. Professor Victor Horsley: Exhibition of some examples of Prehistoric Trephining and Skull-boring from America.—His Excellency Governor Moloney: Exhibition of Cross-bows, Long-bows, Quivers, &c. of Yoruba.—Mr. Henry Balfour: On the Structure and Affinities of the Composite Bow.—Rev. R. H. Codrington: Poisoned Arrows.

Wednesday, June 26.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical visits on Wednesday and Saturday at 9.15 A.M.

Thursday, June 27.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Lauder Brunton: On the Connexion between Chemical Constitution and Physiological Action. (Croonian Lecture.)

Friday, June 28

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, June 29.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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